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As filed with the Securities and Exchange Commission on August 31, 2006

Registration No. 333-135760

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

Amendment No.1

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

METABOLIX, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware	**8731**	**04-3158289**
(State or Other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

21 Erie Street
Cambridge, MA 02139
(617) 492-0505
(Address, including zip code, and telephone number,
including area code, of Registrant's principal executive office)

James J. Barber
Chief Executive Officer
Metabolix, Inc.
21 Erie Street
Cambridge, MA 02139
(617) 492-0505
(Name, address, including zip code, and telephone number,
including area code, of agent for service)

Copies to:

John M. Mutkoski, Esq. **Christopher J. Denn, Esq.** **Robert E. Puopolo, Esq.** **Goodwin Procter LLP** **Exchange Place** **Boston, Massachusetts 02109** **(617) 570-1000**	**Charles Ruck** **Joshua Tinkelman** **Latham & Watkins LLP** **885 Third Avenue** **Suite 1000** **New York, NY 10022** **(212) 906-1200**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. o

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the

Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), shall determine.

Subject to completion, dated , 2006

The information in this prospectus is not complete and may be changed. We may not sell these securities until the Securities and Exchange Commission declares our registration statement effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Shares

METABOLIX, INC.

Common Stock

$ per share

- Metabolix, Inc. is offering shares.
- We anticipate that the initial public offering price will be between $ and $ per share.
- This is our initial public offering and no public market currently exists for our shares.
- Proposed trading symbol: NASDAQ Global Market — MBLX

Archer Daniels Midland Company, our collaborative partner and an existing stockholder, has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the price to the public above. The sale of such shares of common stock will not be registered in this offering. See "Certain Relationships and Related Party Transactions."

This investment involves risk. See "Risk Factors" beginning on page 8.

	Per Share	Total
Initial public offering price	$	$
Underwriting discount	$	$
Proceeds, before expenses, to Metabolix, Inc.	$	$

The underwriters have a 30-day option to purchase up to additional shares of common stock from us to cover over-allotments, if any.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Piper Jaffray

Jefferies & Company **Thomas Weisel Partners LLC**

Ardour Capital Investments, LLC

The date of this prospectus is , 2006.

METABOLIX
where nature performs™

How Natural Plastics are Made

Feedstocks

Metabolix produces Natural Plastics using corn sugars.

Corn syrup is a feedstock in the fermentation process, converted by microorganisms into Natural Plastics within the cell itself.

Fermentation

Archer Daniels Midland is constructing a fermentation plant in Clinton, Iowa.

Proprietary microbes are filled with polymer globules by the end of the fermentation process.

Recovery

The polymer is extracted from the cellular material using a proprietary process and the residual biomass removed by centrifugation.

The polymer is precipitated and excess liquid removed by filtration. It is then dried.

Dried polymer "crumb" is ready for pelletization.

Polymer is formulated and pelletized by conventional processes.

Applications

PHA Natural Plastics can be converted on standard equipment by injection molding, extrusion, paper coateing and other methods into a broad range of useful commercial products.

Biodegradation

These new materials, from renwable resources, perform like traditional plastics, but will biodegrade benignly once their use is over, even in a marine environment.

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This prospectus is not an offer to sell, nor is it seeking an offer to buy, these securities in any state where the offer or sale is not permitted. The information in this prospectus is complete and accurate as of the date on the front cover, but the information may have changed since that date.

PROSPECTUS SUMMARY

The items in the following summary are described in more detail later in this prospectus. This summary provides an overview of selected information and does not contain all of the information you should consider before investing in our common stock. Therefore, you should also read the more detailed information set out in this prospectus, including the financial statements and the related notes appearing elsewhere in this prospectus. References in this prospectus to "we," "us" and "our" refer to Metabolix, Inc.

Metabolix, Inc.

We are a leading biotechnology company that develops and plans to commercialize environmentally sustainable, economically attractive alternatives to petrochemical-based plastics, fuels and chemicals. Our strategy is to develop technology platforms that integrate advanced biotechnology with current industrial practice and to commercialize these platforms with industry leading strategic partners.

Our first platform, which we will be commercializing through a strategic alliance with Archer Daniels Midland Company, or ADM, is a proprietary, large-scale fermentation system for producing a versatile family of naturally occurring polymers known as polyhydroxyalkanoates, which we call *PHA Natural Plastics*. Through the alliance with ADM, we intend to sell these polymers as environmentally friendly, but functionally equivalent alternatives to petrochemical-based plastics in a wide range of commercial applications, including disposable goods, packaging, agricultural products, consumer goods and electronics. Also, as part of the strategic alliance with ADM, we have announced plans to build a 50,000 ton annual capacity commercial scale plant, or Commercial Manufacturing Facility, that will produce biodegradable *PHA Natural Plastics* out of corn sugar, an abundant agriculturally-produced renewable resource. We are currently producing pre-commercial quantities of *PHA Natural Plastics* jointly with ADM at a pilot plant having a capacity of 10 tons per month.

Our second technology platform, which is in an early stage, is a system using switchgrass to co-produce both *PHA Natural Plastics* and biomass feedstock for the production of ethanol. We believe that using switchgrass to co-produce these products can offer superior economic value and productivity as compared to single product systems that produce them individually. We have already achieved significant milestones in this program and can produce small amounts of *PHA Natural Plastics* in switchgrass. Our goals for this program are to have commercially viable switchgrass varieties in pilot field trials within four years and to establish strategic alliances with attractive partners to commercially exploit this platform.

The markets for petrochemical-based plastics, fuels and chemicals are among the largest in the global economy. While these markets encompass a diverse array of products, they are all derived from fossil fuels, particularly petroleum and natural gas. The prolonged broad use of these petrochemical-based products has created several economic, social and environmental issues, including plastic waste management and pollution, rising fossil fuel prices, energy security and climate change. These issues have resulted in rising levels of interest in product alternatives that are renewable, sustainable and not dependent on fossil fuels.

We believe that the widespread use of renewable agricultural feedstocks as manufacturing inputs can address many of the issues associated with petrochemical-based products. Our goal is to become the leader in discovering, developing and commercializing economically attractive, environmentally sustainable alternatives for petrochemical-based plastics, fuels and chemicals. To achieve this goal, we are building a portfolio of programs that we believe will provide not only an attractive slate of

commercial opportunities but also will generate leading and competitive intellectual property positions in the field.

Business Strategy

Key elements of our strategy include:

- **Establishing Production of *PHA Natural Plastics***. We have put into operation a 10 ton per month capacity pilot manufacturing facility to produce *PHA Natural Plastics* to seed the market, and as part of our strategic alliance, ADM and Metabolix have announced plans to build a 50,000 ton annual capacity Commercial Manufacturing Facility to produce *PHA Natural Plastics.* We anticipate that commercial production will commence in 2008.

- **Market Positioning and Sales**. We are building a marketing and sales team to educate and develop our prospective customer base. This team will focus on positioning *PHA Natural Plastics* as premium priced, specialty materials that are environmentally attractive alternatives to petrochemical-based plastics. We intend to build a brand around *PHA Natural Plastics* consistent with this positioning and will seek to co-brand *PHA Natural Plastics* with our customers.

- **Continuing Fermentation Research and Process Development.** We have identified opportunities to improve our production strains and our fermentation and recovery processes. We believe that significant reductions in the cost to manufacture *PHA Natural Plastics* can occur as we successfully exploit these opportunities.

- **Biology and Genetic Engineering.** For our fermentation system, we have modified bacteria by inserting specific genes into the bacteria to biologically convert sugar into *PHA Natural Plastics* all within the bacteria itself. In our switchgrass program, we are modifying certain plants, such as switchgrass, to produce and aggregate *PHA Natural Plastics* within the leaves and stems which we can harvest. Continued developments in genetic engineering and transferring to new plants or production processes are important for our success.

- **Developing Applications for *PHA Natural Plastics***. We have developed formulations of our polymer suitable for various applications, including injection molding, casting film and sheet, molded film and paper coating. These grades will be refined further to tailor them for specific customer performance requirements, and additional grades will be developed for other applications.

- **Advancing Switchgrass Research and Other Plant Strains**. Our switchgrass platform is currently in the research phase. In order to achieve a commercially attractive system, we intend to further improve our plant strains to achieve high levels of *PHA Natural Plastics* content by weight. We also intend to research introducing traits to increase crop yields in terms of tons per acre, and enhance processability for the production of ethanol.

- **Partnering our Switchgrass Program**. We will seek to leverage our technology and establish strategic partnerships with one or more industry leading companies that can provide access to resources and infrastructure valuable for commercializing this platform.

- **Building Governmental Awareness of Our Approach.** We intend to continue to build our governmental affairs initiatives. We believe that higher awareness of our solution may

result in opportunities to obtain additional funding or legislative support that can facilitate and accelerate the adoption of our products.

- **Extending Our Technology to Sustainable Production of Large Volume Chemicals and Intermediates.** Our technical capabilities can be applied to produce a number of important commercial chemicals and chemical intermediates through biological conversion of sustainable feedstocks such as sugars.

- **Furthering our Leading and Competitive Intellectual Property Position.** We have built an intellectual property portfolio around our platform technologies and a variety of inventions relevant to the commercialization of *PHA Natural Plastics*. We are extending this intellectual property portfolio within our core business as well as to other commercial opportunities in the area of bio-based plastics, fuels and chemicals.

ADM Agreement to Purchase Shares

ADM has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the price to the public in this offering.

Risks Associated with Our Business

Our business is subject to numerous risks and uncertainties, as more fully described under "Risk Factors" beginning on page 7, which you should carefully consider prior to deciding whether to invest in our common stock. For example:

- From our founding in 1992, we have been engaged solely in research and development activities and have not had significant sales of *PHA Natural Plastics*.

- We may not be able to manufacture *PHA Natural Plastics* at commercial scale in a timely or economical manner. ADM has yet to begin construction of the commercial manufacturing facility.

- We may not be successful in the development of our products, including *PHA Natural Plastics* in switchgrass.

- We have limited sales and marketing experience and capabilities which may make the commercialization of our products difficult.

- We may not achieve market acceptance of our products.

- We rely heavily on ADM and will rely heavily on future collaborative partners.

- Our success will be influenced by the price of petroleum, the primary ingredient in conventional petrochemical-based plastics, relative to the price of corn sugar, the primary ingredient in our products.

- We have had net losses since being founded in 1992 and our future profitability is uncertain.

Corporate Information

We were incorporated in Massachusetts in June 1992 under the name of Metabolix, Inc. In September 1998, we reincorporated in Delaware.

Our principal executive offices are located at 21 Erie Street, Cambridge, Massachusetts 02139, and our telephone number is (617) 492-0505. Our worldwide web address is *www.metabolix.com*. The information on our web site is not incorporated by reference into this prospectus and should not be considered to be part of this prospectus.

Metabolix, *Biopol* and *Where Nature Performs* are our registered trademarks. This prospectus also includes other registered and unregistered trademarks of ours. All other trademarks, tradenames and service marks appearing in this prospectus are the property of their respective owners.

THE OFFERING

Common stock offered by us	shares
Common stock to be outstanding after this offering	shares
Offering price	$ per share
Use of proceeds	We intend to use the proceeds from this offering to make investments in equipment for pilot manufacturing and commercial formulation and to fund our working capital needs, including for pre-commercial manufacturing and marketing activities with ADM, for switchgrass biorefinery program research and development, for hiring of additional personnel, for other research and development and for general corporate purposes. See "Use of Proceeds."
Proposed NASDAQ Global Market symbol	"MBLX"

The number of shares of common stock that will be outstanding after this offering is based on shares outstanding as of , and assumes the issuance of shares to ADM (the "ADM Shares") in a concurrent private placement and excludes:

- shares of common stock issuable upon exercise of options outstanding as of , 2006;
- shares of common stock issuable upon exercise of warrants outstanding as of , 2006; and
- shares of common stock reserved as of , 2006 for future issuance under our stock-based compensation plans.

Except as otherwise indicated, all information in this prospectus assumes:

- the conversion of all outstanding shares of our preferred stock into 12,225,818 shares of common stock immediately prior to the closing of this offering;
- the issuance in a private placement of the ADM Shares at an assumed initial public offering price of $ per share;
- the filing of our amended and restated certificate of incorporation immediately prior to the closing of this offering; and
- no exercise of the underwriters' over-allotment option.

SUMMARY FINANCIAL DATA

The following tables present summary historical and pro forma as adjusted financial data. We derived the summary statements of operations data for the years ended December 31, 2003, 2004 and 2005 and the summary balance sheet data as of December 31, 2003, 2004 and 2005 from our audited financial statements and related notes included elsewhere in this prospectus. You should read this data together with our financial statements and related notes, "Selected Financial Data," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

The selected condensed consolidated statement of operations data for the six months ended June 30, 2005 and 2006 and the selected condensed consolidated balance sheet data as of June 30, 2006 have been derived from our unaudited condensed consolidated financial statements included elsewhere in this prospectus. Our unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and notes thereto, which include, in the opinion of our management, all adjustments (consisting of normal recurring adjustments), necessary for a fair statement of the information for the unaudited interim period. Our historical results for any prior or interim period are not necessarily indicative of results to be expected for a full fiscal year or for any future period.

	Year ended December 31,			Six months ended June 30,	
	2003	2004	2005	2005	2006
				(unaudited)	
	(in thousands except share and per share data)				
Statements of Operations Data:					
Total revenue	$ 2,383	$ 3,678	$ 2,781	$ 1,509	$ 3,810
Operating expenses:					
Research and development expenses, including cost of revenue	6,204	5,427	5,980	2,824	4,641
General and administrative expenses	2,692	3,252	3,825	2,078	3,397
Total operating expenses	8,896	8,679	9,805	4,902	8,038
Loss from operations	(6,513)	(5,001)	(7,024)	(3,393)	(4,228)
Interest income and (expense), net	(128)	(54)	99	32	340
Loss on investment in related party	—	—	(700)[1]	—	—
Net loss	$ (6,641)	$ (5,055)	$ (7,625)	$ (3,361)	$ (3,888)
Net loss per share Basic and Diluted	$ (2.73)	$ (1.37)	$ (2.09)	$ (0.92)	$ (1.06)
Number of shares used in per share calculations Basic and Diluted	2,436,209	3,681,823	3,640,194	3,638,144	3,655,789
Pro forma net loss per share Basic and Diluted (unaudited)[2]			$ (0.60)		$ (0.25)
Pro forma number of shares used in per share calculation Basic and Diluted (unaudited)[2]			12,715,068		15,397,630

(1) At December 31, 2005, we determined that the fair value of our preferred stock investment in Tepha, Inc. was impaired and recorded an asset impairment charge as to our entire investment in Tepha, Inc.

footnotes continued on following page

(2) We have computed the pro forma basic and diluted net loss per common share and the shares used to compute pro forma basic and diluted net loss per common share included in the statement of operations data as we describe in Note 2 of the notes to our consolidated financial statements.

The summary consolidated balance sheet data as of June 30, 2006 is presented:

- on an actual basis; and
- on a pro forma as adjusted basis to reflect:
- the conversion of all of our outstanding preferred stock into 12,225,818 shares of our common stock;
- the receipt by us of net proceeds of $ million from the sale of the shares of common stock offered by us in this offering at an assumed public offering price of $ per share, less underwriting discounts and commissions and estimated offering expenses payable by us; and
- the receipt by us of proceeds of $7.5 million from the sale of the ADM Shares in a concurrent private placement at an assumed price of $ per share.

	As of December 31,			As of June 30, 2006	
	2003	2004	2005	Actual	Pro forma as adjusted
				(unaudited)	
			(in thousands)		
Balance Sheet Information:					
Cash and short-term investments	$ 1,495	$ 4,455	$ 3,174	$ 15,872	
Total assets	3,331	7,510	7,325	22,044	
Long-term obligations	266	1,440	1,280	1,199	
Long-term deferred revenue	—	3,000	5,621	6,258	
Total liabilities	4,546	7,246	9,874	10,361	
Redeemable, convertible preferred stock	32,640	39,235	44,009	61,442	
Accumulated deficit	(37,495)	(42,549)	(50,175)	(54,063)	
Total stockholders' equity (deficit)	(33,855)	(38,971)	(46,558)	(49,759)	

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risks and other information in this prospectus, including our financial statements and related notes appearing elsewhere in this prospectus, before you decide to invest in shares of our common stock. If any of the events described below actually occurs, our business, financial condition and operating results could be harmed. In such an event, the market price of our common stock would likely decline and you could lose part or all of your investment in our common stock.

Risks Related to Our Business

We may not be able to successfully manufacture *PHA Natural Plastics* at commercial scale in a timely or economical manner.

We are currently producing *PHA Natural Plastics* using our fermentation platform in relatively small quantities, at pilot scale, for use in marketing activities. The current and anticipated methods for manufacturing *PHA Natural Plastics*, both by fermentation and in crops, and the anticipated methods for producing fuels, are highly complex processes in which a variety of difficulties may arise. We may not be able to resolve any such difficulties in a timely or cost effective fashion, if at all. We are currently developing methods for producing *PHA Natural Plastics* in plants, namely switchgrass, though we are only operating at research scale. We cannot predict the cost of producing *PHA Natural Plastics* at commercial scale by fermentation or in switchgrass given the stage of development of this program. We cannot assure you that we will be able to successfully manufacture *PHA Natural Plastics* at a commercial scale in a timely or economical manner using either of our technology platforms.

PHA Natural Plastics can be produced in a large number of different formulations. Each formulation results in a material that has different performance attributes, such as flexibility, hardness or clarity. As such, different formulations will have utility in different commercial applications. Formulation development is a time-consuming and expensive activity. The development of new formulations requires significant and lengthy product development efforts, including planning, designing, developing and testing at the technological, product and manufacturing-process levels. These activities require us to make significant investments. Although there are many potential applications for *PHA Natural Plastics*, our resource constraints require us to focus on specific formulations and to forgo other opportunities. We expect that one or more of the potential formulations we choose to develop will not be technologically feasible or will not achieve commercial acceptance, and we cannot predict which, if any, of our formulations we will successfully develop or commercialize.

Since ADM has yet to begin construction of the Commercial Manufacturing Facility, manufacturing costs at such facility are unknown and may ultimately be higher than we expect. While we believe that manufacturing costs will be reduced over time as we gain manufacturing know-how, we cannot be sure that we can manufacture *PHA Natural Plastics* in an economical manner. If we, in connection with our alliance with ADM, fail to commence production in a timely manner or to develop manufacturing capacity and experience, fail to continue to contract for manufacturing on acceptable terms, or fail to manufacture *PHA Natural Plastics* economically on a commercial scale or in commercial volumes, our commercialization of *PHA Natural Plastics* and our business, financial condition and results of operations will be materially adversely affected.

We may not be successful in the development of our products, including *PHA Natural Plastics* in switchgrass.

In addition to our development and scale-up work to produce *PHA Natural Plastics* through fermentation, we are also at an early stage of development of technology and a process to produce *PHA Natural Plastics* in crops. We are currently focused on the genetic and process engineering required in connection with such programs. Because we will be funding much, or perhaps all, of the development of such programs, there is a risk that we may not be able to continue to fund such programs to completion or to provide the support necessary to distribute, market and sell resulting products, if any, on a worldwide basis. These development programs will consume substantial resources.

To date our efforts to produce *PHA Natural Plastics* in crops has focused primarily on the genetic engineering required to cause the crops to aggregate *PHA Natural Plastics* in the plant mass during the life cycle of the plant. We have not yet achieved a high enough concentration of *PHA Natural Plastic* in commercial crops to make the current technology and process economically feasible at a commercial scale. If we are able to complete the genetic engineering work that leads to such aggregation at acceptable levels, we will also need to perform additional process engineering so that *PHA Natural Plastics* can be recovered from the harvested crops, processed and formulated as required to constitute a marketable product. Such engineering work may not be successful and we may not have the financial resources to fund such work.

In connection with these efforts, we are acquiring know-how and developing technology internally that will be useful in efforts to engineer the crops so that upon completion of the harvest and recovery of *PHA Natural Plastics*, the residual material, or biomass, can be readily converted into fuel through, for example, burning the biomass with coal or other conventional fuels or by converting the biomass into a liquid fuel such as ethanol. These development efforts are at a very early stage. The technological challenges associated with these programs are extraordinary and we may not be able to overcome these challenges. We will be required to invest a significant amount over a long period of time to complete such development work, if it can be completed at all.

If ADM does not successfully build the Commercial Manufacturing Facility on time and on budget, our revenues and the distribution of profits, if any, to us will be delayed.

The cost of planning, designing, constructing and operating the Commercial Manufacturing Facility being developed to serve the alliance with ADM Polymer Corp., a wholly-owned subsidiary of ADM, or the Joint Sales Company, and the cost of ancillary facilities and services related to the production of *PHA Natural Plastics* by the Joint Sales Company, will be very significant. Although the final costs of construction have not been determined, we estimate that our portion of these expenses will be between $20 and $30 million. ADM will be advancing a disproportionate share of the financial capital needed for such activities and as such, all profits, after payment of all royalties, reimbursements and fees, from the Joint Sales Company will first be distributed to ADM until ADM's disproportionate investment in the Joint Sales Company has been returned. If there are difficulties, delays or other unforeseen issues with such activities, the cost of such activities will almost certainly increase and the revenue from sales, if any, of *PHA Natural Plastics* and the distribution of profits, if any, to us will be delayed.

We may not be able to develop manufacturing capacity sufficient to meet demand in an economical manner or at all.

If demand for *PHA Natural Plastics* increases beyond the scope of the Commercial Manufacturing Facility being built to serve the Joint Sales Company, we may incur significant expenses in the

expansion and/or construction of manufacturing facilities and increases in personnel in order to increase manufacturing capacity. To finance the expansion of a commercial-scale manufacturing facility is complex and expensive. We cannot assure you that we will have the necessary funds to finance the development of the Commercial Manufacturing Facility or that ADM will pay its share of the joint venture, or that we will be able to develop this manufacturing infrastructure in a timely or economical manner, or at all. Our collaborative partners could experience financial or other setbacks unrelated to our collaboration that could, nevertheless, adversely affect us.

We may not achieve market acceptance of our products.

We do not currently have customers for any of our products. Market acceptance of our products will depend on numerous factors, many of which are outside of our control, including among others:

- public acceptance of such products;
- ability to produce products that offer functionality comparable or superior to existing or new polymer products;
- our ability to produce products fit for their intended purpose, *e.g.*, the ability of *PHA Natural Plastics* to resist biodegradation for a certain period of time in particular environments;
- the willingness and speed at which potential customers qualify *PHA Natural Plastics* for use in their products;
- pricing of our products compared to competitive products;
- the strategic reaction of companies that market competitive products;
- our reliance on third parties who support or control distribution channels; and
- general market conditions.

Our customer prospects are currently evaluating and performing tests on our plastics prior to making any purchase decisions. We may not be able to successfully demonstrate that our plastics have properties comparable or superior to those of environmentally sustainable competitors or similar to conventional petrochemical-based plastics. There can be no assurance that products based on our technologies will be perceived as being comparable or superior to existing products or new products being developed by competing companies or that such products will otherwise be accepted by consumers. The market for our products may not be willing to support premium prices to purchase environmentally sustainable plastics. If there is not broad market acceptance of our products, we may not generate significant revenues.

We have limited marketing and sales experience and capabilities, which may make the commercialization of our products difficult.

We currently have limited marketing and sales experience and capabilities and virtually no distribution experience or capabilities. We have recently hired a Vice President, Sales and Marketing, to add to those capabilities. We cannot assure you that we will be able to identify or hire additional individuals or that such individuals will perform to the level required. We will, in some instances, rely significantly on sales, marketing and distribution arrangements with our collaborative partners and other third

parties. For example, we will rely on ADM Polymer to participate in and execute important aspects of the distribution of *PHA Natural Plastics* manufactured by ADM and we will use the ADM client base for marketing purposes. Our future revenues will be materially dependent upon the success of the efforts of these third parties and our ability to augment our own resources by identifying and hiring new employees. If we are unable to develop or obtain access to sales and marketing expertise, sales of our products, if any, may be adversely affected.

We rely heavily on ADM and will rely heavily on future collaborative partners.

An important component of our current business plan is to enter into strategic partnerships with large corporations:

- to provide capital, equipment and facilities,
- to provide expertise in performing certain manufacturing and logistical activities,
- to provide funding for research and development programs, product development programs and commercialization activities,
- to provide access to raw materials, and
- to support or provide sales and marketing services.

The strategic alliance with ADM is an example of our implementation of this strategy. These arrangements with collaborative partners are, and will continue to be, critical to our success in manufacturing our products and selling such products profitably. ADM Polymer, a subsidiary of ADM, and, we anticipate, our other future collaborative partners, will be permitted by contract to terminate their agreements with us for no reason and on limited notice. We cannot guarantee that any of these relationships will be entered into, or if entered into, will continue. Failure to make or maintain these arrangements or a delay or failure in a collaborative partner's performance under any such arrangements would materially adversely affect our business and financial condition.

We cannot control our collaborative partners' performance or the resources they devote to our programs. We may not always agree with our partners nor will we have control of our partners' activities on behalf of any alliance. The performance of our programs may be adversely affected and programs may be delayed or terminated or we may have to use funds, personnel, equipment, facilities and other resources that we have not budgeted to undertake certain activities on our own as a result of these disagreements. Performance issues, program delay or termination or unbudgeted use of our resources may materially adversely affect our business and financial condition.

Disputes may arise between us and a collaborative partner and may involve the issue of which of us owns the technology and other intellectual property that is developed during a collaboration or other issues arising out of the collaborative agreements. Such a dispute could delay the program on which we are working or could prevent us from obtaining the right to commercially exploit such developments. It could also result in expensive arbitration or litigation, which may not be resolved in our favor.

Our collaborative partners could merge with or be acquired by another company or experience financial or other setbacks unrelated to our collaboration that could, nevertheless, adversely affect us. For example, our collaboration with BP was recently terminated after the division with which we were collaborating was sold to a third party buyer who was not interested in continuing the collaboration.

Our success will be influenced by the price of petroleum, the primary ingredient in conventional petrochemical-based plastics, relative to corn sugar, the primary ingredient in our products.

Our success will be influenced by the cost of *PHA Natural Plastics* relative to petrochemical-based plastics. The cost of petrochemical-based plastic is in part based on the price of petroleum. Our products are primarily manufactured using corn sugar, an agricultural feedstock. ADM currently supplies all required agricultural feedstock as part of our strategic alliance. Over the past 32 years, the prices of petroleum and corn have diverged dramatically with the increase in petroleum price being approximately eight times whereas the price of corn has remained relatively flat over the same period. If the price of corn or corn sugar were to dramatically increase while the price of petroleum decreased, we may not be able to produce *PHA Natural Plastics* on a cost effective basis relative to petrochemical-based plastics. While we expect to be able to command a premium price for our environmentally sustainable products, a material decrease in the cost of conventional petrochemical-based plastics may require a reduction in the prices of our products for them to remain attractive in the marketplace. In such instance, if corn prices remain stable or increase, we may be required to price our products at a level that causes us to operate at a loss.

Our future profitability is uncertain, and we have a limited operating history on which you can base your evaluation of our business.

We have had net operating losses since being founded in 1992. At June 30, 2006, our accumulated deficit was approximately $54 million. Since 1992, we have been engaged solely in research and development activities. As a part of our strategic alliance, ADM Polymer has yet to begin construction of the commercial scale Commercial Manufacturing Facility for *PHA Natural Plastics*. We currently expect the Commercial Manufacturing Facility to become operational in 2008, and until such time, our revenues from sales of *PHA Natural Plastics* will be limited. Because we have a limited history at commercial operations and we operate in a rapidly evolving industry, we cannot be certain that we will generate sufficient revenue to operate our business and become profitable.

Our product revenue will be dependent on the successful completion of the scale-up and commercialization of *PHA Natural Plastics* through our strategic alliance with ADM, through other partnerships or joint ventures, if any, with third parties and separately for our own account. In addition, if we are unable to develop, commercialize and further advance technologies relating to the production of *PHA Natural Plastics* in crops and other products, or if sales of such *PHA Natural Plastic*s or products are not significant, we could have significant losses in the future due to ongoing expenses to perform research and product development and our inability to obtain additional research and development funding in connection with such products.

In addition, the amount we spend will impact our ability to become profitable and this will depend, in part, on:

- the progress of our research and development programs for the production of *PHA Natural Plastics* in crops and other products;
- the cost of building, operating and maintaining manufacturing and research facilities;
- the number of products that we attempt to develop;
- the time and expense required to prosecute, enforce and/or challenge patent and other intellectual property rights;

- how competing technological and market developments affect our proposed products; and
- the cost of obtaining licenses required to use technology owned by others for proprietary products and otherwise.

We may not achieve any or all of these goals and, thus, we cannot provide assurances that we will ever be profitable or achieve significant revenues. If we fail to achieve profitability or significant revenues, the market price of our common stock will likely decrease.

We may need to secure additional funding and may be unable to raise additional capital on favorable terms or at all.

We have consumed substantial amounts of capital since our inception in 1992 for our research and development activities. For the year ended December 31, 2005 we used $6.3 million in cash, cash equivalents and investment securities to fund our operating and investing activities. Although we believe our existing cash resources of $ plus the proceeds of this offering and anticipated payments from the strategic alliance with ADM of $1,575,000 per calendar quarter will be sufficient to fund our anticipated cash requirements for at least the next 24 months, we may require significant additional financing in the future to fund our operations. We cannot assure you that additional financing will be available on terms acceptable to us, or at all. Until we can generate significant continuing revenues, we expect to satisfy our future cash needs through strategic collaborations, private or public sales of our securities, debt financings, governmental research grants, or by licensing all or a portion of our programs or technology. If funds are not available, we may be required to delay, reduce the scope of, or eliminate one or more of our research or development programs or our commercialization efforts. Further, additional funding may significantly dilute existing stockholders.

If we lose key personnel or are unable to attract and retain necessary talent, we may be unable to develop or commercialize our products under development.

We are highly dependent on James Barber, our President and Chief Executive Officer, Oliver Peoples, our Chief Scientific Officer and Johan van Walsem, our VP of Manufacturing, Development and Operations. Dr. Barber possesses unique talent and experience relating to our business and the markets in which we operate. Dr. Peoples and Mr. van Walsem possess unique information related to our research and manufacturing operations. Dr. Peoples was one of our founders and has led and directed all of our scientific research and development programs. Dr. Peoples has such particular knowledge in the research, development and intellectual property aspects in connection with the production of *PHA Natural Plastics*, that in the case of the loss of his services we would be unable to readily find a suitable replacement with comparable knowledge and experience necessary to further our research and development programs. Mr. van Walsem directs our manufacturing operation and has been instrumental in developing manufacturing know-how sufficient to operate our pilot scale manufacturing plant. Mr. van Walsem has also been directing the design of the commercial scale Commercial Manufacturing Facility with ADM. The loss of Mr. van Walsem's services to us would be difficult to readily replace and may adversely impact the achievement of our objectives.

Our success depends largely upon the continued service of our management and scientific staff and our ability to attract, retain and motivate highly skilled technical, scientific, management, regulatory compliance and marketing and sales personnel. Because of the unique talents and experience of many of our scientific, engineering and technical staff, competition for our personnel is intense. The loss of key personnel or our inability to hire and retain personnel who have required expertise and skills could materially adversely affect our research and development efforts and our business.

Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information and may not adequately protect our intellectual property, which could limit our ability to compete.

Because we operate in the highly technical field of biotechnology discovery and development, we rely in part on trade secret protection in order to protect our proprietary technology and processes. However, trade secrets are difficult to protect. We enter into confidentiality and intellectual property assignment agreements with our employees, consultants, outside scientific collaborators, and other advisors. These agreements generally require that the other party keep confidential and not disclose to third parties all confidential information developed by the party or made known to the party by us during the course of the party's relationship with us. These agreements also generally provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. Enforcing a claim that a party illegally obtained and is using our trade secrets is difficult, expensive and time consuming and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. The failure to obtain or maintain trade secret protection could adversely affect our competitive position.

Patent protection for our products is important and uncertain.

Our commercial success will depend in part on our obtaining and maintaining patent, trade secret and trademark protection of our technologies in the United States and other jurisdictions, as well as successfully enforcing this intellectual property and defending this intellectual property against third-party challenges. We will only be able to protect our technologies from unauthorized use by third parties by keeping them as trade secrets or to the extent that valid and enforceable intellectual property protections, such as patents, cover them. In particular, we place considerable emphasis on obtaining patent protection for significant new technologies, products and processes in the United States and in foreign jurisdictions where we plan to use such technologies. Legal means may afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. Foreign jurisdictions may not afford the same protections as U.S. law, and we cannot ensure that foreign patent applications will have the same scope of the U.S. patents.

Our patent position involves complex legal and factual questions. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications and issued patents;
- we or our licensors might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies not encompassed by our patents;
- our issued patents and issued patents of our licensors may not provide us with any competitive advantages, or may be challenged and invalidated by third parties; and
- we may not develop additional proprietary technologies that are patentable.

Patents may not be issued for any pending or future pending patent applications owned by or licensed to us, and claims allowed under any issued patent or future issued patent owned or licensed by us may not be valid or sufficiently broad to protect our technologies. Moreover, we may be unable to protect certain of our intellectual property in the United States or in foreign countries. Any issued patents owned by or licensed to us now or in the future may be challenged, invalidated, or circumvented, and the rights under such patents may not provide us with competitive advantages. For example, P&G filed a nullity action in the Federal Patent Court in Munich, Germany, against the German equivalent of one of our patents covering the method of use of producing biopolymers. In addition, competitors may design around our technology or develop competing technologies. We could incur substantial costs to bring suits in which we may assert our patent rights against others or defend ourselves in suits brought against us. An unfavorable outcome of any such litigation could have a material adverse effect on our business and results of operations.

We also rely on trade secrets to protect our technology, especially where we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. We vigorously pursue confidentiality agreements and contractual provisions with our collaborators, potential customers, employees, and consultants to protect our trade secrets and proprietary know-how. These agreements may be breached and we may not have adequate remedies for such breach. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors or scientific and other advisors, our potential customers, or our strategic partners may unintentionally or willfully disclose our proprietary information to competitors. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, our enforcement efforts would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes unwilling to protect trade secrets. Moreover, if our competitors independently develop equivalent knowledge, methods and know-how, it will be more difficult for us to enforce our rights and our business could be harmed.

If we are not able to defend the patent or trade secret protection position of our technologies, then we will not be able to exclude competitors from developing or marketing competing technologies, and we may not generate enough revenues from product sales to justify the cost of development of our technologies and to achieve or maintain profitability.

We also rely on trademarks to establish a market identity for our products. We currently have five registered trademarks in the United States and three pending trademark applications filed with the U.S. Patent and Trademark Office and we expect to file additional applications as new trademarks are selected for our products. To maintain the value of our trademarks, we might have to file lawsuits against third parties to prevent them from using trademarks confusingly similar to or dilutive of our registered or unregistered trademarks. Also, we might not obtain registrations for our pending or future trademark applications, and might have to defend our registered trademark and pending trademark applications from challenge by third parties. Enforcing or defending our registered and unregistered trademarks might result in significant litigation costs and damages, including the inability to continue using certain trademarks. In the event that we are unable to continue using certain trademarks, we may be forced to rebrand our products, which could result in the loss of brand recognition, and could require us to devote resources to advertise and market brands.

A substantial portion of the technology used in our business is owned by or subject to retained rights of third parties.

We often enter into research and development agreements with academic institutions that retain rights to the developed intellectual property. The academic institutions generally retain ownership rights over the technology for use in non-commercial academic and research fields, including in some cases the

right to license the technology to third parties for use in those fields. It is difficult to monitor and enforce such noncommercial academic and research uses, and we cannot predict whether the third party licensees would comply with the use restrictions of these licenses. We could incur substantial expenses to enforce our rights against such licensees. In addition, even though the rights that academic institutions obtain are generally limited to the noncommercial academic and research fields, they may obtain rights to commercially exploit developed intellectual property in limited instances. Furthermore, under research and development agreements with academic institutions, our rights to intellectual property developed thereunder is not always certain, but instead may be in the form of an option to obtain license rights to such intellectual property. If we fail to timely exercise our option rights and/or we are unable to negotiate a license agreement, the academic institution may offer a license to the developed intellectual property to third parties for commercial purposes. Any such commercial exploitation could adversely affect our competitive position and have a material adverse effect on our business.

A substantial portion of our core technology is protected by patents that are owned by Massachusetts Institute of Technology, or MIT, and exclusively licensed to us for the life of the patents. The MIT license covers 11 issued U.S. patents, one U.S. application and numerous foreign counterparts. We cannot be certain that our right to use these patents will continue. MIT has the right to terminate this exclusive license for our nonpayment of royalties or our material breach which remains uncured. Although no material licenses are due to expire in the near future, the expiration of patents licensed from third parties or the termination of those licenses could have a material adverse effect on our business.

Some of our patents may cover inventions that were conceived or first reduced to practice under, or in connection with, U.S. government contracts or other federal funding agreements. With respect to inventions conceived or first reduced to practice under such federal funding agreements, the U.S. government may retain a nonexclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the invention throughout the world. In addition, if we fail to comply with our reporting obligations or to adequately exploit the developed intellectual property under these federal funding agreements, the U.S. government may obtain additional rights to the developed intellectual property, including the right to take title to any patents filed by us or to permit others to commercially exploit the intellectual property itself. Furthermore, our ability to exclusively license or assign the intellectual property developed under these federal funding agreements to third parties may be limited or subject to the U.S. government's approval or oversight. These limitations could have a significant impact on the commercial value of the developed intellectual property.

Third parties may claim that we infringe their intellectual property, and we could suffer significant litigation or licensing expense as a result.

Various U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in areas relevant to *PHA Natural Plastics* and fuels, their compositions, formulations and uses, and processes for their production. Such third parties may claim that we infringe their patents. Because patent applications are maintained in secrecy for a period of time after they are filed, there may be currently pending applications, unknown to us, which may later result in issued patents that our technologies may infringe. For example, we are aware of competitors with patents relating to *PHA Natural Plastic*. Such competitors may allege that we infringe these patents. There could also be existing patents of which we are not aware that our technologies may inadvertently infringe. If third parties assert claims against us alleging that we infringe their patents or other intellectual property rights, we could incur substantial costs and diversion of management resources in defending these claims, and the defense of these claims could have a material adverse effect on our business. In

addition, if third parties assert claims against us and we are unsuccessful in defending against these claims, these third parties may be awarded substantial damages, as well as injunctive or other equitable relief against us, which could effectively block our ability to make, use, sell, distribute, or market our products and services in the United States or abroad. We cannot currently predict whether a third party will assert a claim against us, or pursue infringement litigation against us; nor can we predict the ultimate outcome of any such potential claims or litigation.

In the event that a claim relating to intellectual property is asserted against us, or third parties not affiliated with us hold pending or issued patents that relate to our products or technology, we may seek licenses to such intellectual property or challenge those patents. However, we may be unable to obtain these licenses on acceptable terms, if at all, and our challenge of the patents may be unsuccessful. Our failure to obtain the necessary licenses or other rights could prevent the sale, manufacture, or distribution of some of our products and, therefore, could have a material adverse effect on our business.

If we are unable to manage our growth effectively, our business could be adversely affected.

While historically we have focused the majority of our efforts on research and development of processes to produce *PHA Natural Plastics* using our fermentation platform, we plan to grow by allocating additional resources to developing marketing and sales expertise and resources, entering into additional collaborations with strategic partners, adding personnel with specific technological experience, and developing and commercializing additional products, such as *PHA Natural Plastics* using our switchgrass technology platform, and biological production of other chemicals and chemical intermediates from renewable resources. Our ability to grow in this manner will require that we manage a diverse range of relationships and projects, expand our personnel resources and perhaps broaden our geographic presence. Our inability to do any of these could prevent us from successfully implementing our growth strategy, and our business could be adversely affected.

We believe that sustained growth at a higher rate will place a strain on our management, as well as on our other human resources. To manage this growth, we must continue to attract and retain qualified management, professional, scientific and technical and operating personnel. If we are unable to do so, we may be unable to staff and manage projects adequately, which may slow the development process, result in the commercialization of fewer products or compromise the quality of our work.

We may not be successful in identifying market needs for new technologies and developing new products to meet those needs.

The success of our business model depends on our ability to correctly identify market opportunities for biologically produced plastics, fuels and chemicals. We intend to identify new market needs, but we may not always have success in doing so, in part because customers may perceive risks in adopting new materials, like *PHA Natural Plastics*, for use with existing products and because the markets for new materials and other products are not well-developed.

The materials and manufacturing technologies we research and develop are new and are steadily changing and advancing. The products that are derived from these technologies may not be applicable or compatible with the demands in existing markets. Our existing products and technologies may become uncompetitive or obsolete if our competitors adapt more quickly than we do to new technologies and changes in customers' requirements. Furthermore, we may not be able to identify new opportunities as they arise for our products since future applications of any given product may not be readily determinable, and we cannot reasonably estimate the size of any markets that may develop. If we are not able to successfully develop new products, we may be unable to increase our product revenues.

Our products are made using genetically modified products which may be, or may be perceived as being, harmful to human health or the environment.

PHA Natural Plastics are new materials produced from genetically-engineered microbes and in the future may be produced in genetically-engineered crops. Some countries have adopted regulations prohibiting or limiting the production of genetically-engineered crops. Regulations or prohibitions on the production of genetically-engineered crops could harm our business and impair our ability to produce *PHA Natural Plastics* in that manner.

The subject of genetic engineering of crops and other species has received negative publicity and has aroused public debate. Government authorities could, for social or other purposes, prohibit or regulate the development and use of genetically-engineered organisms. Social concerns could adversely affect acceptance of our potential products. Governmental regulation or negative publicity could reduce or eliminate market demand for our products which could have a material adverse effect on our results of operations and financial condition.

We face and will face substantial competition in several different markets that may adversely affect our results of operations.

The plastics, fuels and chemicals that we have developed or plan to develop will compete with other technologically innovative products as well as conventional petrochemical-based plastics, materials and fuels. We face and will face substantial competition from a variety of companies in the biodegradable, renewable resource based plastic segment, within which there are three distinct technologies: PHA, PLA and starch based biodegradables. While some of our competitors' existing products that are produced from renewable feedstocks do not have the range of properties that *PHA Natural Plastics* offer, such products are, nonetheless, suitable for use in a range of products at a price which may be lower than our premium priced product offerings. Other companies active in the PHA plastic segment include Kaneka. Our other competitors include, but are not limited to, key players in PLA and starch based biodegradables, Cargill, Mitsui Chemical, Toyota, Novamont and Stanelco, as well as all of the producers of petrochemical-based plastics.

Many of our competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, sales and marketing, manufacturing, distribution, technical and other resources than we do. These competitors may be able to adapt more quickly to new or emerging technologies and changes in customer requirements. In addition, current and potential competitors have established or may establish financial or strategic relationships among themselves or with existing or potential customers or other third parties. Accordingly, new competitors or alliances among competitors could emerge and rapidly acquire significant market share. We cannot assure you that we will be able to compete successfully against current or new competitors.

We are subject to significant foreign and domestic government regulations, including environmental and health and safety regulations, and failure to comply with these regulations could harm our business.

Our current and planned activities involve the use of a broad range of materials that are, or may be, considered hazardous under applicable laws and regulations. Accordingly, we are subject to a number of foreign, federal, state, and local laws and regulations relating to health and safety, protection of the environment, and the storage, use, disposal of, and exposure to, hazardous materials and wastes. We could incur costs, fines and civil and criminal penalties, personal injury and third party property damage claims, or could be required to incur substantial investigation or remediation costs if we were to violate or become liable under environmental, health and safety laws. Moreover, a failure to comply with environmental laws could result in fines and the revocation of environmental permits, which

could prevent us, or our strategic partners, from conducting business. Liability under environmental laws can be joint and several and without regard to fault. There can be no assurance that violations of environmental health and safety laws will not occur in the future as a result of the inability to obtain permits, human error, equipment failure or other causes. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could harm our business. Accordingly, violations of present and future environmental laws could restrict our ability to expand facilities, pursue certain technologies, and could require us to acquire costly equipment, or to incur potentially significant costs to comply with environmental regulations.

Compliance with foreign, federal, state and local environmental laws and regulations represents a small part of our present budget. If we fail to comply with any such laws or regulations, however, a government entity may levy a fine on us or require us to take costly measures to ensure compliance. Any such fine or expenditure may adversely affect our business activities, financial condition or results of operations. We cannot predict the extent to which future legislation and regulation could cause us to incur additional operating expenses, capital expenditures, or restrictions and delays in the development of our products and properties.

Our government grants may subject us to government audits, which could materially harm our business and results of operations.

We may be subject to audits by the U.S. federal government as part of routine audits of our activities funded by our government grants. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards. If any of our costs are found to be allocated improperly, the costs may not be reimbursed and any costs already reimbursed for such contract may have to be refunded. Accordingly, an audit could result in a material adjustment to our revenue and results of operations. Moreover, if an audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions.

We face risks associated with our international business.

We expect to establish, and to expand over time, international commercial operations and activities. Such international business operations are subject to a variety of risks associated with conducting business internationally, including:

- changes in or interpretations of foreign regulations that may adversely affect our ability to sell our products, perform services or repatriate profits to the United States;
- the imposition of tariffs;
- economic or political instability in foreign countries;
- imposition of limitations on or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries or joint ventures;
- conducting business in places where business practices and customs are unfamiliar and unknown;
- the imposition of restrictive trade policies;
- the imposition of inconsistent laws or regulations;

- imposition of limitations on genetically-engineered crops and organisms and the production or sale of products therefrom in foreign countries;
- the imposition or increase of investment requirements and other restrictions or requirements by foreign governments;
- uncertainties relating to foreign laws and legal proceedings;
- having to comply with a variety of U.S. laws, including the Foreign Corrupt Practices Act;
- having to comply with U.S. export control regulations and policies that restrict our ability to communicate with non-U.S. employees and supply foreign affiliates and customers; and
- having to comply with licensing requirements.

We do not know the impact that these regulatory, geopolitical and other factors may have on our international business in the future.

If we are unable to develop, implement and maintain appropriate internal controls we will not be able to comply with applicable regulatory requirements imposed on reporting companies.

Beginning with our annual report for the year ending December 31, 2007, Section 404 of the Sarbanes-Oxley Act of 2002 requires us to include an internal control report with our annual report on Form 10-K. That report must include management's assessment of the effectiveness of our internal control over financial reporting as of the end of the fiscal year. Additionally, under the current rules, our independent registered public accounting firm will be required to issue a report on management's assessment of our internal control over financial reporting and a report on their evaluation of the operating effectiveness of our internal control over financial reporting.

Our business operations are relatively small and, as a result, we have operated with very limited staffing of key accounting and administrative functions. Such limited staffing made it difficult for us to segregate certain accounting functions. As our business matures from solely research and development into commercial operations and we become a registered public company, we will need additional accounting and finance staffing to support our expanding business operations and to comply with the additional reporting and regulatory requirements of being a public company. We plan on hiring additional personnel in our accounting and finance function in order to have sufficient staffing levels. Our development, implementation and maintenance of appropriate internal controls will depend materially on our successful hiring and retention of key senior accounting personnel with appropriate technical accounting expertise.

We continue to informally evaluate our existing internal control over financial reporting against the standards adopted by the Public Company Accounting Oversight Board, or PCAOB. In addition, we have not yet begun a formal evaluation, documentation and analysis of our internal controls. During the course of our ongoing informal evaluation of the internal controls, or once we begin the formal evaluation, documentation and testing of our internal controls, we may identify areas requiring improvement, and may have to design enhanced processes and controls to address issues identified through this review. Remedying any deficiencies, significant deficiencies or material weaknesses that we or our independent registered public accounting firm may identify may require us to incur significant costs and expend significant time and management resources. While we believe that we will be able to successfully implement internal controls, we cannot assure you that any of the measures we implement to remedy any such deficiencies will effectively mitigate or remedy such deficiencies or weaknesses. Investors could lose confidence in our financial reports, and our stock price may be adversely affected, if our internal control over financial reporting is found not to be effective by management or by an

independent registered public accounting firm or if we make disclosure of existing or potential significant deficiencies or material weaknesses in those controls.

Changes in, or interpretations of, accounting rules and regulations, such as revenue recognition and expensing of stock options, could result in unfavorable accounting treatment or require us to change our compensation policies.

Accounting methods and policies, including policies governing revenue recognition, expenses, and accounting for stock options are subject to further review, interpretation and guidance from relevant accounting authorities, including the SEC. Changes to, or interpretations of, accounting methods or policies in the future may require us to reclassify, restate or otherwise change or revise our financial statements, including those contained in this prospectus.

Prior to January 1, 2006, we were not required to record stock-based compensation charges if the employee's stock option exercise price equaled or exceeded the fair market value of our common stock at the date of grant. As permitted by SFAS No. 123, we accounted for share-based payments to employees through December 31, 2005 using APB Opinion No. 25's intrinsic value method and, as such, generally recognized no compensation cost for employee stock options. Accordingly, the adoption of SFAS No. 123R's fair value method will have a material adverse impact on our results of operations, although it will have no impact on our overall financial position. The effect of adopting SFAS No. 123R on the six-months ended June 30, 2006 was an increase in net loss by $89,000 and the total compensation cost related to these options not yet recognized in the financial statements is approximately $729,000 to be expensed over the next 3.74 years. The actual impact of SFAS No. 123R in future periods will depend on levels of share-based payments granted in the future and the assumptions for the variables which impact the computation.

We rely heavily on stock options to motivate existing employees and to attract new employees. Since we are now required to expense stock options, we may then choose to reduce our reliance on stock options as employee compensation. If we reduce our use of stock options, it may be more difficult for us to attract and retain qualified employees. If we do not reduce our reliance on stock options, our reported losses will increase.

Our pilot manufacturing recovery operations are currently conducted at a single location which makes us susceptible to disasters.

Our pilot manufacturing recovery operations are currently conducted at a single location in Fort Mill, South Carolina. As part of the strategic alliance with ADM, ADM intends to construct a Commercial Manufacturing Facility at a single location in Clinton, Iowa, where we will initially conduct all of our commercial manufacturing operations. Our headquarters and research and development operations are located at a single facility in Cambridge, Massachusetts. We take precautions to safeguard our facilities, including insurance, health and safety protocols, and off-site storage of critical research results and of computer data. However, a natural disaster, such as a fire, flood or earthquake, could cause substantial delays in our operations, damage or destroy our manufacturing equipment, inventory or development projects, and cause us to incur additional expenses. The insurance we maintain against fires, floods, earthquakes and other natural disasters may not be adequate to cover our losses in any particular case.

Risks Related to This Offering

There is no existing market for our common stock, and we do not know if one will develop to provide you with adequate liquidity. If the stock price fluctuates after this offering, you could lose a significant part of your investment.

Prior to this offering, there has been no public market for our common stock. An active public trading market may not develop after completion of this offering or, if developed, may not be sustained. The initial public offering price for our common stock will be determined by negotiations between us and the underwriters and may not be indicative of prices that will prevail in the open market following this offering. The public trading price for our common stock after this offering will be affected by a number of factors, including:

- reported progress of our business and technology development, including construction of the commercial plant relative to investor expectations;
- changes in earnings estimates, investors' perceptions, recommendations by securities analysts or our failure to achieve analysts' earning estimates;
- quarterly variations in our or our competitors' results of operations;
- general market conditions and other factors unrelated to our operating performance or the operating performance of our competitors;
- future sales of our common stock;
- announcements by us, or our competitors, of acquisitions, new products, significant contracts, commercial relationships or capital commitments;
- commencement of, or involvement in, litigation;
- any major change in our board of directors or management;
- changes in governmental regulations or in the status of our regulatory approvals;
- announcements related to patents issued to us or our competitors and to litigation involving our intellectual property;
- a lack of, limited or negative industry or security analyst coverage;
- developments in our industry and general economic conditions; and
- the other factors described elsewhere in these "Risk Factors."

As a result of these factors, you may not be able to resell your shares at, or above, the initial offering price. In addition, the stock prices of many technology companies have experienced wide fluctuations that have often been unrelated to the operating performance of those companies. These factors may materially and adversely affect the market price of our common stock.

New investors in our common stock will experience immediate and substantial dilution.

Our initial public offering price is substantially higher than the book value per share of our common stock. If you purchase common stock in this offering, you will incur immediate dilution of $ in net tangible book value per share of common stock, based on an assumed

initial public offering price of $ per share, the mid-point of the range on the front cover of this prospectus. In addition, the number of shares available for issuance under our stock plans may increase annually without further stockholder approval. Investors will incur additional dilution upon the exercise of stock options and warrants. See "Dilution."

If a substantial number of shares become available for sale and are sold in a short period of time, the market price of our common stock could decline.

If our existing stockholders sell a large number of shares of our common stock or the public market perceives that these sales may occur, the market price of our common stock could decline. Upon the closing of this offering and the sale of the ADM Shares, assuming no outstanding options or warrants are exercised prior to the closing of this offering, we will have approximately shares of common stock outstanding. The shares to be sold under this prospectus will be freely tradable without restriction or further registration under the federal securities laws, unless purchased by our affiliates. Taking into consideration the effect of the 180-day lock-up agreements that have been entered into by certain of our stockholders, we estimate that the remaining shares of our common stock outstanding upon the closing of this offering will be available for sale pursuant to Rule 144, Rule 144(k) and Rule 701, as follows:

Number of Shares	
	shares will be immediately eligible for sale in the public market without restriction pursuant to Rule 144(k);
	additional shares will be eligible for sale in the public market under Rule 144 or Rule 701 beginning 90 days after the date of this prospectus, subject to volume, manner of sale, and other limitations under those rules;
	additional shares will become eligible for sale, subject to the provisions of Rule 144, Rule 144(k) or Rule 701, beginning 180 days after the date of this prospectus, upon the expiration of agreements not to sell such shares entered into between the underwriters and such stockholders; and
	additional shares will be eligible for sale from time to time thereafter upon expiration of their respective one-year holding periods, but could be sold earlier if the holders exercise any available registration rights.

Existing stockholders holding an aggregate of shares of common stock (including shares of our common stock issuable upon conversion of our preferred stock or purchasable pursuant to warrants to purchase our common stock), based on shares outstanding as of June 30, 2006, have rights with respect to the registration of these shares of common stock with the SEC. See "Description of Capital Stock — Registration Rights." If we register these shares of common stock, these holders will be able to sell immediately those shares in the public market.

Piper Jaffray, on behalf of the underwriters, may in its sole discretion, at any time without notice, agree to release all or any portion of the shares subject to the lock-up agreements, which would result in more shares being available for sale in the public market at earlier dates. Sales of common stock by existing stockholders in the public market, the availability of these shares for sale, our issuance of securities or the perception that any of these events might occur could materially and adversely affect the market price of our common stock.

Our management will have broad discretion over the use of the proceeds to us from this offering and might not apply the proceeds of this offering in ways that increase the value of your investment.

Our management will have broad discretion to use the net proceeds from this offering, and you will have to rely on the judgment of our management regarding the application of these proceeds. Our management might not apply the net proceeds of this offering in ways that increase the value of your investment. We expect to use the net proceeds from this offering to make investments in equipment and operations for formulating *PHA Natural Plastics* to their final form for commercial sale and to finance our working capital needs, including:

- to develop pilot plant manufacturing, marketing and sales and other pre-commercial activities related to our alliance with ADM,
- the hiring of additional personnel for expansion of our switchgrass research and development program,
- for conduct of research and development for new opportunities in, for example, the biological production of key chemicals and chemical intermediates for renewable resources, and
- for general corporate purposes.

We have not allocated these net proceeds for any specific purposes. Our management might not be able to yield a significant return, if any, on any investment of these net proceeds.

Our directors and management will collectively control over % of our outstanding common stock.

Immediately after this offering, our directors and executive officers and their affiliates will collectively control approximately % of our outstanding common stock or approximately % if the underwriters exercise their over-allotment option in full. As a result, these stockholders, if they act together, will be able to influence our management and affairs and all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. You and other stockholders will have minimal influence over these actions. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might adversely affect the market price of our common stock.

Our financial results may vary significantly from period to period which may reduce our stock price.

Our financial results may fluctuate as a result of a number of factors, many of which are outside of our control, which may cause the market price of our common stock to fall. For these reasons, comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. Our financial results may be negatively affected by any of the risk factors listed in this "Risk Factors" section and, in particular, the following risks:

- failure to estimate or control contract costs;
- adverse judgments or settlements in legal disputes;
- expenses related to acquisitions, mergers or joint ventures;
- other one-time financial charges;

- fluctuations due to revenue recognition under strategic alliance agreements. See "Management's Discussion and Analysis of Financial Condition and Results of Operations";

- failure to produce commercialized products or to find customers for these products; and

- that some of our programs are supported by government funding, which is inherently unpredictable.

Provisions in our certificate of incorporation and by-laws and Delaware law might discourage, delay or prevent a change of control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Provisions of our certificate of incorporation and by-laws and Delaware law may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions include:

- limitations on the removal of directors;

- a classified board of directors so that not all members of our board are elected at one time;

- advance notice requirements for stockholder proposals and nominations;

- the inability of stockholders to act by written consent or to call special meetings;

- the ability of our board of directors to make, alter or repeal our by-laws;

- a supermajority stockholder vote requirement for amending certain provisions of our amended and restated certificate of incorporation and bylaws; and

- the ability of our board of directors to designate the terms of and issue new series of preferred stock without stockholder approval.

The affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote is necessary to amend or repeal the above provisions of our certificate of incorporation. In addition, absent approval of our board of directors, our by-laws may only be amended or repealed by the affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote.

In addition, Section 203 of the Delaware General Corporation Law prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock and do not currently intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy and plans prospects, projected revenue or costs and objectives of management for future research, development or operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, although not all forward-looking statements contain these identifying terms. We have identified below some important factors that could cause our forward-looking statements to differ materially from actual results, performance or financial conditions:

- our ability to become profitable;
- the ability of our products to achieve market acceptance;
- our ability to successfully manufacture *PHA Natural Plastics* at commercial scale in a timely or economical manner;
- our reliance on ADM and on future collaborative partners;
- our inability to effectively protect our intellectual property and not infringe on the intellectual property of others;
- our inability to raise sufficient capital when necessary or at satisfactory valuations;
- our ability to successfully develop platforms and products other than our fermentation system for producing *PHA Natural Plastics*;
- the loss of key personnel; and
- other factors discussed elsewhere in this prospectus.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other similar words, although not all forward-looking statements contain these identifying terms. These statements are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and results of operations. We discuss many of the risks in greater detail under the heading "Risk Factors." Also, these forward-looking statements represent our estimates and assumptions only as of the date of this prospectus. Except as required by law, we assume no obligation to update any forward-looking statements after the date of this prospectus.

This prospectus also contains estimates and other statistical data made by independent parties and by us relating to market size and growth, commodity prices and other industry data. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the industries in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

USE OF PROCEEDS

We estimate that the net proceeds to us of the sale of the common stock that we are offering will be approximately $ million or approximately $ million if the underwriters exercise their over-allotment option in full, assuming an initial public offering price of $ per share, which is the midpoint of the range listed on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses that we must pay. A $1.00 increase (decrease) in the assumed initial public offering price of $ would increase (decrease) the net proceeds to us from this offering by $ million, assuming the number of shares offered by us, as set forth on the cover of this prospectus (and including the sale of the ADM Shares), remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters' overallotment option is exercised in full, we estimate the net proceeds payable to us will be approximately $ million.

We intend to use $20 to $30 million of the net proceeds of this offering to make investments in equipment and operations for pilot manufacturing and formulating *PHA Natural Plastics* to their final form for commercial sale, and to fund our working capital needs, including marketing and sales and other pre-commercial activities related to our alliance with ADM. We also intend to use the net proceeds of this offering for the hiring of additional personnel, for research and development activities related to the ADM alliance, for expansion of our switchgrass research and development program, for conduct of research and development of new opportunities in, for example, the biological production of certain key chemicals and chemical intermediates from renewable resources and for general corporate purposes.

We may also use a portion of the net proceeds to us to expand our current business through strategic alliances with, or acquisitions of, other businesses, products, intellectual properties or technologies. We currently have no agreements or commitments for any specific acquisitions at this time.

This expected use of the net proceeds of this offering represents our current intentions based upon our present plans and business condition. The amounts and timing of our actual expenditures will depend upon numerous factors, including cash flows from operations and the anticipated growth of our business. We will retain broad discretion in the allocation and use of our net proceeds. See "Risk Factors — Risks Related to This Offering — Our management will have broad discretion over the use of proceeds to us from this offering and might not apply the proceeds of this offering in ways that increase the value of your investment."

Pending any use, as described above, we plan to invest the net proceeds in investment-grade, short-term, interest-bearing securities.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock and do not expect to pay any cash dividends for the foreseeable future. We intend to use future earnings, if any, in the operation and expansion of our business. Any future determination relating to our dividend policy will be made at the discretion of our board of directors, based on our financial condition, results of operations, contractual restrictions, capital requirements, business properties, restrictions imposed by applicable law and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our capitalization as of June 30, 2006, as follows:

- on an actual basis; and
- on a pro forma as adjusted basis to give effect to the conversion of all of our convertible preferred stock into shares of our common stock, and to reflect receipt by us of net proceeds of $ from the sale of shares of common stock that we are offering at an assumed initial public offering price of $ per share, which is the midpoint of the range listed on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and to reflect the sale of ADM Shares at an assumed initial public offering price of $ per share.

You should read the following table in conjunction with our financial statements and related notes and the sections entitled "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus.

	As of June 30, 2006	
	Actual	Pro forma as adjusted
	(In thousands, except share and per share amounts)	
Cash and cash equivalents[1]	$ 15,225	$
Short term investment	647	
Total debt	1,379	
Preferred stock	61,442	—
Stockholders' equity (deficit):		
Common stock, $.01 par value; 26,500,000 shares authorized, 2,536,895 shares issued, and 2,523,895 shares outstanding, actual; 100,000,000 shares authorized, shares issued and outstanding, pro forma as adjusted;	25	
Treasury stock (at cost), 13,000 shares	(35)	
Additional paid-in capital[1]	4,357	
Deferred compensation	(43)	
Accumulated deficit	(54,063)	
Total stockholders' (deficit)[1]	(49,759)	
Total capitalization[1]	$ 13,062	$

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $ would increase (decrease) each of cash and cash equivalents, common stock, additional paid-in capital, total stockholders' equity and total capitalization by $ million, assuming the number of shares offered by us, as set forth on the cover of this prospectus (and including the sale of the ADM Shares), remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

DILUTION

Our net tangible book value as of June 30, 2006, was $ million, or $ per share of common stock. Net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the number of shares of common stock outstanding as of June 30, 2006 after giving effect to the assumed conversion of all of our convertible preferred stock.

After giving effect to the sale by us of shares of common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the range listed on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and after giving effect to the sale by us of the ADM Shares at an assumed initial public offering price of $, our adjusted net tangible book value as of June 30, 2006 would have been approximately $ million, or approximately $ per share. This amount represents an immediate increase in net tangible book value of $ per share to our existing stockholders and an immediate dilution in net tangible book value of approximately $ per share to new investors purchasing shares of common stock in this offering at the assumed initial public offering price. Assuming the underwriters exercise their over-allotment option, our adjusted net tangible book value as of June 30, 2006 would have been approximately $ million, or approximately $ per share. This amount represents an immediate increase in net tangible book value of $ per share to our existing stockholders and an immediate dilution in net tangible book value of approximately $ per share to new investors purchasing shares of common stock in this offering at the assumed initial public offering price. We determine dilution by subtracting the adjusted net tangible book value per share after this offering from the amount of cash that a new investor paid for a share of common stock. The following table illustrates this dilution on a per share basis:

Initial public offering price per share		$
Net tangible book value as of June 30, 2006	$	
Increase attributable to this offering		
Adjusted net tangible book value per share after this offering		
Dilution in net tangible book value per share to new investors		$

The following table summarizes, as of June 30, 2006, the differences between the number of shares purchased from us, the total consideration paid to us in cash and the average price per share that existing stockholders and new investors paid. The following table also reflects the consideration to be paid to us in connection with the exercise of outstanding options and warrants held by officers, directors and affiliates. The following table does not reflect any non-cash consideration paid to us, or deemed to be paid to us, by our existing stockholders. The calculation below is based on an assumed initial public offering price of $ per share, which is the midpoint of the range listed on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses that we must pay:

	Shares Purchased		Total Consideration		
	Number	Percent	Amount	Percent	Average Price Per Share
Existing stockholders		%	$	%	$
Shares underlying options and warrants held by officers, directors, and affiliates					
New investors					
Total		%	$	%	$

A $1.00 increase (decrease) in the assumed initial public offering price of $ would increase (decrease) our pro forma net tangible book value per share after this offering by $ per share, the pro forma as adjusted net tangible book value per share after this offering by $ per share and the dilution in pro forma net tangible book value to new investors by $ per share, assuming the number of shares offered by us, as set forth on the cover of this prospectus (and including the sale of the ADM Shares), remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

As of June 30, 2006, we had outstanding options to purchase a total of shares of common stock at a weighted average exercise price of $ per share, and outstanding warrants to purchase a total of shares of common stock at a weighted average exercise price of $ per share. To the extent any of these options or warrants are exercised, there will be further dilution to new investors.

SELECTED FINANCIAL DATA

The selected condensed consolidated statement of operations data for the years ended December 31, 2003, 2004 and 2005 and balance sheet data as of December 31, 2004 and 2005 have been derived from our consolidated financial statements and related notes, which are included elsewhere in this prospectus, and have been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as indicated in their report. The selected condensed consolidated statement of operations data for the years ended December 31, 2001 and 2002 and the balance sheet data as of December 31, 2001, 2002 and 2003 have been derived from our audited financial statements that do not appear in this prospectus. The selected financial data set forth below should be read in conjunction with our financial statements, the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. The historical results are not necessarily indicative of the results to be expected for any future period.

The selected condensed consolidated statement of operations data for the six months ended June 30, 2006 and 2005 and the selected condensed consolidated balance sheet data as of June 30, 2006 have been derived from our unaudited condensed consolidated financial statements included elsewhere in this prospectus. Our unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and notes thereto, which include, in the opinion of our management, all adjustments (consisting of normal recurring adjustments), necessary for a fair statement of the information for the unaudited interim period. Our historical results for any prior or interim period are not necessarily indicative of results to be expected for a full fiscal year or for any future period.

	Year ended December 31,					Six months ended June 30,	
	2001	2002	2003	2004	2005	2005	2006
						(unaudited)	
	(in thousands, except share and per share data)						
Statement of Operations Data:							
Total revenue	$ 441	$ 1,989	$ 2,383	$ 3,678	$ 2,781	$ 1,509	$ 3,810
Operating expenses:							
Research and development expenses, including cost of revenue	6,309[1]	4,409	6,204	5,427	5,980	2,824	4,641
General and administrative expenses	3,024	2,644	2,692	3,252	3,825	2,078	3,397
Total operating expenses	9,333	7,053	8,896	8,679	9,805	4,902	8,038
Loss from operations	(8,892)	(5,064)	(6,513)	(5,001)	(7,024)	(3,393)	(4,228)
Interest income and (expense), net	(44)	(124)	(128)	(54)	99	32	340
Loss on investment in related party	—	—	—	—	(700)[2]	—	—
Net loss	$ (8,936)	$ (5,188)	$ (6,641)	$ (5,055)	$ (7,625)	$ (3,361)	$ (3,888)
Net loss per share Basic and Diluted	$ (4.10)	$ (2.38)	$ (2.73)	$ (1.37)	$ (2.09)	$ (0.92)	$ (1.06)
Number of shares used in per share calculations Basic and Diluted	2,179,562	2,180,205	2,436,209	3,681,823	3,640,194	3,638,144	3,655,789
Pro forma net loss per share Basic and Diluted (unaudited)[3]					$ (0.60)		$ (0.25)
Pro forma number of shares used in per share calculation Basic and Diluted (unaudited)[3]					12,715,068		15,397,630

(1) Research and development expenses include the cost associated with acquired technology of $3,000.

(2) At December 31, 2005, we determined that the fair value of our preferred stock investment in Tepha, Inc. was impaired and recorded an asset impairment charge to our entire investment in Tepha, Inc.

(3) We have computed the pro forma basic and diluted net loss per common share and the shares used to compute pro forma basic and diluted net loss per common share included in the statement of operations data as we describe in Note 2 to our consolidated financial statements.

The summary consolidated balance sheet data as of June 30, 2006 is presented:

- on an actual basis; and
- on a pro forma as adjusted basis to reflect:
- the conversion of all of our outstanding preferred stock into shares of our common stock;
- the receipt by us of net proceeds of $ million from the sale of the shares of common stock offered by us in this offering at an assumed public offering price of $ per share, less underwriting discounts and commissions and estimated offering expenses payable by us; and
- the receipt by us of proceeds of $7.5 million from the sale of the ADM Shares in a concurrent private placement at an assumed price of $ per share.

	As of December 31,						
	2001	2002	2003	2004	2005	As of June 30, 2006	Pro forma as adjusted
						(unaudited)	
			(in thousands)				
Balance Sheet Information:							
Cash and short-term investments	$ 298	$ 868	$ 1,495	$ 4,455	$ 3,174	$ 15,872	$
Total assets	1,202	2,561	3,331	7,510	7,325	22,044	
Long-term obligations	1,455	857	266	1,440	1,280	1,199	
Long-term deferred revenue	—	—	—	3,000	5,621	6,258	
Total liabilities	3,972	3,588	4,546	7,246	9,874	10,361	
Redeemable convertible preferred stock	22,490	27,764	32,640	39,235	44,009	61,442	
Accumulated deficit	(25,666)	(30,855)	(37,495)	(42,549)	(50,175)	(54,063)	
Total stockholders' equity (deficit)	(25,259)	(28,791)	(33,855)	(38,971)	(46,558)	(49,759)	

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and related notes that appear elsewhere in this prospectus. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results may differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this prospectus, particularly in "Risk Factors."

Overview

We are a leading biotechnology company that develops and plans to commercialize environmentally sustainable, economically attractive alternatives to petrochemical-based plastics, fuels and chemicals. Our strategy is to develop technology platforms that integrate advanced biotechnology with current industrial practice and commercialize these platforms with industry leading strategic partners. Our first platform, which we will be commercializing through a strategic alliance with Archer Daniels Midland Company, or ADM, is a proprietary, large-scale microbial fermentation system for producing a versatile family of naturally occurring polymers known as polyhydroxyalkanoates, which we call *PHA Natural Plastics*. Our microbial fermentation system combines *e-coli* bacteria with corn sugar and other materials in a fermenter. The bacteria digests the corn sugar and produces *PHA Natural Plastics* inside of the bacteria. We separate the *PHA Natural Plastics* from the remainder of the bacteria and formulate the polymer into its final form for commercial sale. Through the alliance with ADM, we intend to sell these polymers as environmentally friendly, but functionally equivalent alternatives to petrochemical-based plastics in a wide range of commercial applications, including disposable goods, packaging, agricultural products, consumer goods and electronics. As part of the strategic alliance with ADM, we have announced plans to build a 50,000 ton annual capacity commercial scale plant, or the Commercial Manufacturing Facility, that will produce biodegradable *PHA Natural Plastics* out of corn sugar, an abundant agriculturally-produced renewable resource. We are currently producing pre-commercial quantities of *PHA Natural Plastics* jointly with ADM at a pilot plant having a capacity of 10 tons per month.

Our second technology platform, which is in an early stage, is a biomass biorefinery system using switchgrass to co-produce both *PHA Natural Plastics* and biomass feedstock for the production of ethanol. For this system, we are engineering switchgrass to produce *PHA Natural Plastics* in the leaf and stem of the plant. We intend to extract the polymer from switchgrass and use the remaining plant material as a biomass feedstock for the production of energy products including electricity and ethanol. Switchgrass is a commercially and ecologically attractive, non-food energy crop that is indigenous to North America and is generally considered to be a leading candidate for cellulose-derived ethanol production. We believe that using switchgrass to co-produce these products can offer superior economic value and productivity as compared to single product systems that produce them individually. We have been working on our biomass biorefinery platform using switchgrass with support from the U.S. Department of Energy and the U.S. Department of Agriculture for several years, and we believe we are a scientific leader in this field. Our goals for this program are to have commercially viable switchgrass varieties in pilot field trials within four years and to establish strategic alliances with attractive partners to commercially exploit this platform.

To date, we have generated revenues primarily from government grants and to a lesser extent from license fees, royalty payments, and research and development revenue. We have funded our operations

primarily through the sale of equity securities, government grants and, more recently, from upfront and milestone payments from our collaborative partners.

In 2004, we entered into the Technology Alliance and Option Agreement with ADM Polymer Corporation, or ADM Polymer, a subsidiary of ADM. The goal of the Technology Alliance and Option Agreement was to demonstrate the capabilities of our fermentation and recovery technologies at commercial scale and to prepare a master plan and budget for the construction of a commercial facility with a 50,000 ton per year capacity. Upon achievement of such goals, ADM Polymer had the option to enter into a commercial alliance, by execution of the Commercial Alliance Agreement, for further research, development, manufacture, use and sale of *PHA Natural Plastics*. In November of 2004, we received a $3.0 million upfront payment from ADM, and in May 2006, we received $2.0 million in milestone payments associated with the achievement of certain goals. On July 12, 2006, ADM Polymer exercised its option under our Technology Alliance and Option Agreement and entered into a Commercial Alliance Agreement with us. Upon entering into the Commercial Alliance Agreement, the Technology Alliance and Option Agreement terminated pursuant to its terms. We anticipate our funding from commercial partners under collaborative arrangements to rise as the Commercial Alliance Agreement calls for up to 12 quarterly payments of $1.575 million during the construction period of the Commercial Manufacturing Facility. The first two such payments totaling $3.15 million were received in July 2006.

Since our inception in 1992, we have focused on the research of our platform technologies, the acquisition of patents to enhance these platforms, product development and pilot manufacturing of *PHA Natural Plastics*. Commercialization of *PHA Natural Plastics* will require significant additional expenditures, including research and development, pilot manufacturing, product development and sales and marketing organization development, and we expect these expenditures to increase in future years.

As of June 30, 2006, we had 43 full-time employees, of whom 31 are scientists specializing in *PHA Natural Plastics* production in microbial fermentation and plant technologies as well as extraction and manufacturing of *PHA Natural Plastics* from these technologies. We expect that we will add a significant number of employees throughout the remainder of 2006 and during 2007 to support our research, development, sales and marketing and to build the infrastructure necessary to operate as a public company.

We have incurred significant losses since our inception. As of June 30, 2006, our deficit accumulated from inception to date was $54 million and total stockholders' deficit was $49.8 million. We recognized net losses of $7.6 million, $5.1 million and $6.6 million in 2005, 2004 and 2003, respectively and $3.9 million and $3.4 million in the first six months of 2006 and 2005, respectively. We expect our net losses to increase in the next two years as we continue our pilot manufacturing development, expand our research and development and add the necessary infrastructure to support operating as a public company.

Collaborative Arrangements

Our strategy for collaborative arrangements is to retain substantial participation in the future economic value of our technology while receiving current cash payments to offset research and development costs and working capital needs. By their nature, these agreements are complex and have multiple elements that cover a variety of present and future activities. In addition, certain elements of these agreements are intrinsically difficult to separate and treat as separate units for accounting purposes. Consequently, we expect to defer recognizing most, if not all, of the payments we receive from partners as revenue until future years.

We entered into our alliance with ADM in November 2004 and a joint development arrangement with BP in February 2005. As of June 30, 2006, all payments received from ADM had been recorded as deferred revenue on our balance sheet. We expect that future payments from ADM, through at least the construction phase of the Commercial Alliance Agreement, including quarterly operating payments, and other payments will be classified as deferred revenue as well. The deferred revenue associated with the BP arrangement was recognized in full during the first quarter of 2006 when the alliance was terminated. We anticipate recognizing revenue for the payments received from ADM after the obligations under the multiple element arrangements are delivered.

We received the following payments from these arrangements to offset operating cash needs during 2004 and 2005 and first six months of 2006:

- upfront payment of $3.0 million from ADM in November 2004;
- milestone payment of $2.0 million from ADM in May 2006;
- cost sharing payments from ADM for pilot manufacturing plant construction and operations of $620,000 during 2005 and an additional $587,000 during the first six months ended June 30, 2006; and
- upfront payment of $1.0 million and three subsequent quarterly payments of $500,000 each, totaling $2.5 million in payments from BP during 2005 and 2006.

United States Government Contracts and Grants

As of June 30, 2006, gross proceeds of $3.13 million remained to be received under our various government contracts and grants, which include amounts for reimbursement to our subcontractors, as well as reimbursement for our employees' time and benefits and other expenses related to performance under the various contracts.

The status of our United States government contracts and grants is as follows:

Program Title	Funding Agency	Total government funds (in $M)	Total received through June 30, 2006 (in $M)	Remaining amount to be received as of June 30, 2006 (in $M)	Contract/Grant Expiration
Biomass Biorefinery for the Production of Polymers and Fuel	Department of Energy[1]	$ 7.48	$ 5.51	$ 1.83	Apr. 2007
Industrial Genome Engineering	Department of Commerce	$ 1.64	$ 1.64	$ —	Jul. 2005
Advanced Biorefinery Feedstocks	Department of Agriculture	$ 2.00	$ 1.79	$ 0.21	Oct. 2006
PHA Bioplastic Packaging Materials	SERDP[2]	$ 1.01	$ —	$ 1.01	Aug. 2008
Blow Molded Bioproducts from Natural Plastics	Department of Agriculture	$ 0.08	$ —	$ 0.08	Dec. 2006
Total		**$ 12.21**	**$ 8.94**	**$ 3.13**	

(1) Funding of these government contracts and grants beyond the United States government's current fiscal year is subject to annual congressional appropriations.

(2) Strategic Environmental Research and Development Program

Revenues

Revenues for the years ended December 31, 2005, 2004 and 2003 were primarily derived from government grants and totaled $2.8 million, $3.7 million and $2.4 million, respectively. Revenues totaled $3.8 million and $1.5 million for the first six months ended June 30, 2006 and 2005, respectively. The six month 2006 amounts include $2.5 million of revenue associated with the termination of the BP joint development agreement. We expect the revenues from government grants to fluctuate due to availability of funding from the government, and the revenue from collaborative arrangements will be recognized as future obligations under the agreements are completed. We expect research and development revenue to decline for the remainder of 2006 as we are not anticipating any other revenue from collaborative agreements to be recognized.

Research and Development Expenses

Our operating expenses to date have substantially been for research and development activities. Research and development expenses consist of costs associated with research activities, as well as costs associated with our product development efforts, including pilot manufacturing costs. All research and development costs, including those funded by third parties, are expensed as incurred. Research and development expenses include:

- consultant and employee related expenses, which include salary and benefits;
- external research and development expenses incurred under agreements with third party organizations and universities; and
- facilities, depreciation and other allocated expenses, which include direct and allocated expenses for rent and maintenance of facilities, depreciation of leasehold improvements and equipment and laboratory and other supplies.

Research and development expenses for 2005, 2004 and 2003 were $6.0 million, $5.4 million and $6.2 million, respectively, and $4.6 million and $2.8 million in the first six months of 2006 and 2005, respectively. These expenses are related to developing our platform technologies and *PHA Natural Plastics* pilot manufacturing production. We expect that our expenses will increase significantly during 2006 as we continue pilot manufacturing production and expand our research and development programs.

We have not reported our internal historical research and development costs or our personnel and personnel-related costs on a project-by-project basis. Our programs share a substantial amount of our common fixed costs such as facilities, depreciation, utilities and maintenance. Accordingly, we do not track our research and development costs by individual research and development program.

We expect to incur increasing research and development expenses in future periods as we continue our pilot manufacturing and product development trials for our product derived from microbial fermentation. The potential for commercial success of our *PHA Natural Plastics* may be impacted by numerous factors, including partnership continuance with ADM, product properties, manufacturing capability and commercial viability.

In addition, we expect research and development expenditures to grow as we advance our switchgrass program and explore other commercial opportunities our technology platform can be applied to. We cannot predict what it will cost to complete our research and development projects or when they will be completed and commercialized. The timing and cost of any project is dependent upon achieving

technical objectives, which are inherently uncertain. In addition, our business strategy contemplates entering into collaborative arrangements with third parties for one or more of our programs. In the event that third parties assume responsibility for certain research or development activities, the estimated completion dates of those activities will be under the control of the third party rather than with us. We cannot forecast with any certainty which programs if any, will be subject to future collaborative arrangements, in whole or in part, and how such arrangements would affect our research and development plans or capital requirements.

As a result of the uncertainties discussed above, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will receive cash inflows from the commercialization and sale of products. Our inability to complete our research and development projects in a timely manner or our failure to enter into collaborative agreements, when appropriate, could significantly increase our capital requirements and could adversely impact our liquidity. These uncertainties could force us to seek additional, external sources of financing from time to time in order to continue with our strategy. Our inability to raise additional capital, or to do so on terms reasonably acceptable to us, would jeopardize the future success of our business.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for personnel in executive, finance, accounting, marketing and sales, business development, information technology, legal and human resources functions. Other general and administrative expenses include patent related costs, facility costs not otherwise included in research and development expenses and professional fees for legal, consulting and accounting services.

General and administrative expenses were $3.8 million, $3.3 million and $2.7 million in 2005, 2004 and 2003, respectively, and $3.4 million and $2.1 million in the first six months of 2006 and 2005, respectively. These expenses include patent protection fees for our extensive patent portfolio. We expect that our general and administrative expenses will increase as we expand our legal and accounting staff and marketing and sales staff, add infrastructure and incur additional costs related to operating as a public company, including directors' and officers' insurance, investor relations programs, increased director fees, increased professional fees and non-cash stock-based compensation expense.

Critical Accounting Estimates and Judgments

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates.

We believe that of our significant accounting policies, which are described in the notes to our consolidated financial statements, the following accounting policies involve a greater degree of judgment and complexity. Accordingly, we believe that the following accounting policies are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of operations.

Revenue Recognition

We recognize revenue under government research grants when the related expense is incurred and we have obtained governmental approval to use the grant funds for agreed upon budgeted expenses.

For revenue received under our arrangements with ADM and BP, we recognize revenue in accordance with the Staff Accounting Bulletin ("SAB") 104, *Revenue Recognition*, and Emerging Issues Task Force ("EITF") Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*.

Our arrangement with ADM contains multiple elements including obligations for us to provide future formulation services, sales and marketing services and certain research and development activities, amongst others. We have determined that these elements cannot be separated and accounted for individually as separate units of accounting. Therefore payments received from ADM have been classified as deferred revenue at the respective balance sheet dates and will be recognized in future periods after the commencement of product commercialization and as the final deliverables under the arrangements are being completed. More specifically, we believe revenue will commence approximately at the time of the first commercial sale of *PHA Natural Plastics* and amounts will be recognized proportionately over the period that the final services are provided, over the remaining term of the Commercial Alliance Agreement. As of June 30, 2006, payments received from ADM totaling $6.2 million have been recorded as deferred revenue, including non-refundable up-front payments totaling $3.0 million, $2.0 million in milestone payments and approximately $1.2 million in reimbursements related to pilot manufacturing construction and operating costs.

Under our joint development arrangement with BP, we received $2.0 million in 2005. Due to these amounts being applicable for determining BP's equity participation in a potential future joint venture between the parties, these amounts were recorded as deferred revenue at December 31, 2005. We recognized the revenue for this amount, plus an additional $0.5 million which became due in the first quarter of 2006, upon the termination notice from BP in January 2006, as we have been released from any future obligations under this agreement.

Fees to license the use of the Company's proprietary and licensed technologies are recognized only after both the license period has commenced and the technology has been delivered to the customer. Royalty revenue is recognized when it becomes determinable and collectibility is reasonably assured, otherwise the Company recognizes revenue upon receipt of payment.

Stock-Based Compensation

Effective January 1, 2006, the Company adopted *Statement of Financial Accounting Standards ("SFAS") No. 123-revised, Share-Based Payment* ("SFAS 123R"), which revises SFAS No. 123, *Accounting for Stock Based Compensation* ("SFAS 123") and supersedes Accounting Principles Board ("APB") Opinion No. 25, *Accounting for Stock Issued to Employees* ("APB 25"). SFAS 123R requires that all stock-based compensation be recognized as an expense in the consolidated financial statements and that such expense be measured at the fair value of the award.

We adopted SFAS 123R using the prospective method of application, which requires us to recognize compensation expense on a prospective basis; therefore, prior period consolidated financial statements have not been restated. Compensation expense recognized includes the expense of stock options granted on and subsequent to January 1, 2006. Stock options granted by us prior to that time are specifically excluded from SFAS 123R and will continue to be accounted for in accordance with APB 25. These options were valued using the minimum value method.

Determining the appropriate fair value model and calculating the fair value of stock-based payment awards require the use of highly subjective assumptions, including the expected life of the stock-based payment awards and stock price volatility. In 2006, we began using the Black-Scholes option-pricing model to value our option grants and determine the related compensation expense. The assumptions used in calculating the fair value of stock-based payment awards represent management's best

estimates, but the estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future. Prior to the adoption of SFAS 123R, we had adopted SFAS 123, but in accordance with SFAS No. 123, we had elected not to apply fair value-based accounting for our awards under the employee stock incentive plan through December 31, 2005. Instead, we have measured compensation expense for our stock plans using the intrinsic value method prescribed by APB 25, and related interpretations and provided pro forma disclosures as permitted under SFAS No. 148, *Accounting for Stock-Based Compensation — Transition and Disclosure an amendment of SFAS 123*.

In 2006, the Black-Scholes option pricing model employs the following key assumptions for option grants.

	June 30, 2006
Expected dividend yield	—
Risk-free interest rate	4.89%
Expected option term (in years)	6.1
Volatility	75%

For the period ended June 30, 2006, expected volatility is based on review of the volatility of peer companies adjusted for newly public company increased expected volatility. Management believes that the historical volatility of the Company's stock price does not best represent the expected volatility of the stock price.

The risk-free interest rate used for each grant is equal to the U.S. Treasury yield curve in effect at the time of grant for instruments with a similar expected life.

For the period ended June 30, 2006, the expected term of the options granted was determined using the "simplified" method for "plain vanilla" options as permitted by Staff Accounting Bulletin No. 107.

The stock price volatility and expected terms utilized in the calculation involve management's best estimates at that time, both of which impact the fair value of the option calculated under the Black-Scholes methodology and, ultimately, the expense that will be recognized over the life of the option. SFAS 123R also requires that the Company recognize compensation expense for only the portion of options that are expected to vest. Therefore, the Company has estimated expected forfeitures of stock options with the adoption of SFAS 123R. In developing a forfeiture rate estimate, the Company considered its historical experience, its growing employee based and the limited liquidity of its common stock. If the actual number of forfeitures differs from those estimated by management, additional adjustments to compensation expense may be required in future periods.

The effect of adopting SFAS 123R on the six months ended June 30, 2006 was an increase in net loss by $89,000. We expect to record increased and material compensation expenses related to the adoption of SFAS 123R in later quarters of 2006 and future years as we continue to issue stock options to expand and retain our staffing in research and development and general and administrative functions.

In addition, for the six months ended June 30, 2006, we recorded $259,000 of additional stock based compensation including $164,000 associated with nonemployees and $95,000 associated with a 2005 grant to an employee accounted for under a variable method.

We have historically granted stock options at exercise prices equivalent to the fair value of our common stock as estimated by our board of directors, with input from management, as of the date of grant. Because there has been no public market for our common stock, our board of directors determined the fair value of our common stock by considering a number of objective and subjective factors, including our operating and financial performance and corporate milestones, the prices at which we sold shares of convertible preferred stock, the superior rights and preferences of securities senior to our common stock at the time of each grant and the risk and non-liquid nature of our common stock. We have not historically obtained contemporaneous valuations by an unrelated valuation specialist because, at the time of the issuances of stock options, we believed our estimates of the fair value of our common stock to be reasonable based on the foregoing factors.

In anticipation of a potential public offering, we re-assessed the valuation of our common stock at December 31, 2005. There was an immaterial difference between the original estimated fair value and the re-assessed valuation of the common stock related to the grants made during December 2005. Therefore we have not made any retrospective adjustments to our accounting for stock options.

In 2006, determining the fair value of our stock requires making complex and subjective judgments. Our approach to valuation of the enterprise is based on a discounted future cash flow approach that uses our estimates of revenue, driven by assumed market growth rates, and estimated costs as well as appropriate discount rates. These estimates are consistent with the plans and estimates that we use to manage the business. There is inherent uncertainty in making these estimates. The enterprise value was then allocated to preferred and common shares using the option-pricing method which involves making estimates of the anticipated timing of a potential liquidity event such as a sale of our company or an initial public offering, and estimates of the volatility of our equity securities. The anticipated timing is based on the plans of our board and management. Estimating the volatility of the share price of a privately held company is complex because there is no readily available market for the shares. We estimated the volatility of our stock based on available information on volatility of stocks of publicly traded companies in the industry. Had we used different estimates of volatility, the allocations between preferred and common shares would have been different.

Results of Operations

Comparison of the Six Months Ended June 30, 2006 and 2005

Revenue

Our revenue for the six months ended June 30, 2006 and 2005 was $3.8 million and $1.5 million, respectively. We recognized revenue from research and development services of $2.5 million and $31,000 during the first six months of 2006 and 2005, respectively. The increase was due to the recognition of $2.5 million in revenue from our joint development arrangement with BP in the first six months of 2006 upon the termination of the arrangement by BP in January 2006, as we have been released from any future performance obligations. We also recognized revenue for government grants of $1.1 million and $1.3 million during the first six months of 2006 and 2005, respectively. In the first six months of 2006, we recognized revenue of $190,000 from license fees and royalty income as compared to $134,000 in the same period for 2005.

Research and Development Expenses

Research and development expenses increased to approximately $4.6 million in the first six months of 2006 from $2.8 million in the same period in 2005. The increase was due primarily to increased spending on pilot material production of *PHA Natural Plastics*, increased staffing and other personnel

related costs to support our collaborative arrangements. We expect that research and development expenses for pilot manufacturing and testing of *PHA Natural Plastics* will continue to increase in later periods of 2006 as we prepare to develop, test and refine products to meet the product specification requirements of our customers. We expect that our staffing and personnel related costs will also increase to support the research programs for our microbial and plant programs. We did not incur any material expenses during the first six months of 2006 due to the adoption of SFAS 123R on January 1, 2006, however we expect to record increased compensation expenses in future quarters of 2006 and future years.

General and Administrative Expenses

General and administrative expenses increased to $3.4 million in the first six months of 2006 from $2.1 million in the first six months of 2005. This increase was primarily due to increased staffing in sales and marketing expenses and also staffing necessary to manage and support our preparation for going public. Our general and administrative expenses also increased due to stock based compensation charges of $331,000 primarily due to a 2005 variable option grant and options granted to nonemployees and expenses associated with the adoption of SFAS 123R. Expenses during the first six months of 2006 due to the adoption of SFAS 123R on January 1, 2006 totaled $89,000 and we expect to record increased compensation expenses in future quarters of 2006 and future years.

We expect that our general and administrative expenses will increase as we expand our legal and accounting staff and marketing and sales staff, add infrastructure and incur additional costs related to operating as a public company, including directors' and officers' insurance, investor relations programs, increased director fees, increased professional fees and non-cash stock-based compensation expense.

Comparison of the Years Ended December 31, 2005 and 2004

Revenue

Our revenue for 2005 and 2004 was $2.8 million and $3.7 million, respectively. We recognized revenue from government grants of $2.4 million during 2005 as compared to $3.2 million during 2004. The decrease of $0.8 million of government grant revenue was due to the expiration of a government grant in 2005. We expect that our grant revenue will fluctuate year to year depending on available funding from government agencies. We recorded approximately $2.6 million of payments from collaborative arrangements as deferred revenue. In 2005, we recognized revenue of $242,000 from license fees and related royalty payments as compared to $392,000 during 2004. The decrease was substantially due to a change in our assessment regarding the collectibility of certain license fees and royalty payments due from a related party which are now recognized on a cash basis. We also recognized $106,000 and $97,000 of research and development revenue during 2005 and 2004 respectively.

Research and Development Expenses

Research and development expenses increased to $6.0 million in 2005 from approximately $5.4 million in 2004. The increase was due primarily to increased rent for expanded facilities and related operating expenses, as well as increased staffing and other personnel related costs to support our collaborative arrangements in 2005. We expect that research and development expenses for pilot manufacturing and testing of *PHA Natural Plastics* will continue to increase in 2006 as we prepare to test and refine product to meet the product specification requirements of our customers. We expect that our staffing and personnel related costs will also increase to support the research programs for our microbial and plant programs.

General and Administrative Expenses

General and administrative expenses increased to $3.8 million in 2005 from $3.3 million in 2004. This increase was primarily due to increased patent costs for protecting our extensive and increasing patent portfolio, as well as some increased staffing necessary to manage and support our growth. We also expect to record additional compensation expenses related to the adoption of SFAS 123R in 2006 and future years.

We expect that our general and administrative expenses will increase as we expand our legal and accounting staff and marketing and sales staff, add infrastructure and incur additional costs related to operating as a public company, including directors' and officers' insurance, investor relations programs, increased director fees, increased professional fees and non-cash stock-based compensation expense.

Loss on investment in related party

During 2005 we recorded an asset impairment charge of $700,000 for an investment in Tepha, Inc., a related party. We do not expect to incur any additional such charges during 2006 as there is no remaining net book value. See Footnote 8 to our financial statements included in this prospectus.

Comparison of the Years Ended December 31, 2004 and 2003

Revenue

Our revenue for 2004 and 2003 was $3.7 million and $2.4 million, respectively. We recognized revenue from government grants of $3.2 million during 2004 as compared to $2.1 million during 2003. The increase of approximately $1.1 million of government grant revenue was due to the start of a new government grant in 2004 and the full year in operation of another multi-year grant received during 2003. We expect that our grant revenue will fluctuate year to year depending on available funding from government agencies. We recorded approximately $3.0 million of payments in 2004 from collaborative arrangements as deferred revenue and we recognized $234,000 of previously deferred government revenue. In 2004, we recognized revenue of $392,000 from license fees and related royalty payments as compared to $113,000 during 2003. The primary reason for this increase in royalties received was due to a licensing agreement with a related party. We also recognized $97,000 and $120,000 of research and development revenue during 2004 and 2003, respectively.

Research and Development Expenses

Research and development expenses decreased to $5.4 million in 2004 from $6.2 million in 2003. The higher expenses during 2003 were due primarily to increased contract spending of $0.5 million to test larger scale proof-of-concept production of *PHA Natural Plastics*.

General and Administrative Expenses

General and administrative expenses increased to $3.3 million in 2004 from $2.7 million in 2003. This increase was primarily due to increased professional fees incurred to negotiate and enter into agreements relating to our alliance with ADM concluded during 2004 and our joint development arrangement with BP in early 2005. We also incurred increased consultant costs to manage and support our growth.

Income Taxes

Since inception, we have incurred operating losses and, accordingly, have not recorded a provision for income taxes for any of the periods presented. As of December 31, 2005, we had net operating loss carryforwards for federal and state income tax purposes of $26.0 million and $16.8 million, respectively. As of December 31, 2005, we also had federal and state research and development tax credit carryforwards of $1.1 million and $0.9 million, respectively. If not utilized, the federal and state net operating loss carryforwards will begin expiring in 2008 and 2006, respectively and tax credit carryforwards will expire beginning in 2012. The annual limitation may result in the expiration of our net operating loss and tax credit carryforwards before they can be used and therefore we have fully reserved the associated tax asset. Utilization of net operating loss and credit carryforwards may be subject to a substantial annual limitation due to limitations provided by the Internal Revenue Code of 1986, as amended, that are applicable if we experience an "ownership change" that may occur, for example, as a result of this offering aggregated with certain other sales of our stock before or after this offering.

Liquidity and Capital Resources

Since inception, we have financed our operations primarily through private placements of equity securities, receiving aggregate net proceeds from such sales totaling $61.4 million, revenues primarily from government grants and our joint development arrangement with BP totaling $15.7 million and payments arising from our strategic alliance with ADM of $6.2 million as of June 30, 2006. As of June 30, 2006, we had $15.9 million in cash, cash equivalents and short-term investments. Our cash and investment balances are held in money market accounts and short-term instruments. Cash in excess of immediate requirements is invested in short-term instruments with regard to liquidity and capital preservation.

Net cash used in operating activities was $3.4 million and $2.7 million during the first six months in 2006 and 2005, respectively and $4.4 million, $1.0 million and $5.1 million in 2005, 2004 and 2003 respectively. The net cash used in each of these periods primarily reflects net loss for these periods, offset in part by depreciation, non-cash stock-based compensation for non-employees and non-cash changes in operating assets and liabilities. During 2004 the landlord for our new research facilities provided lease incentives to offset our leasehold improvement costs of approximately $1.5 million and we also received $3.0 million in payments under the alliance agreement with ADM. During 2005 we received $2.0 million and $620,000 in payments from the joint development arrangement with BP and alliance agreement with ADM, respectively. During the first six months of 2006, we received a $500,000 final payment from the joint development arrangement with BP, and $2.0 million in milestone payments and $587,000 in reimbursements related to pilot manufacturing construction and operation costs from ADM in conjunction with our alliance agreement.

Net cash used in investing activities was $267,000 and $51,000 during the first six months in 2006 and 2005, respectively, and $1.9 million, $3.1 million and $35,000 in 2005, 2004 and 2003, respectively. Investing activities consist primarily of purchases and sales of marketable securities and capital purchases. During 2005, we rolled over the certificate of deposit along with an additional amount of interest earned amounting to $36,000 and during 2004, we purchased a $1.3 million certificate of deposit. During the first six months in 2006 we purchased additional certificates of deposits for $16.2 million and a certificate of deposit for $1.2 million matured. Purchases of property and equipment were $958,000 and $54,000 during the first six months in 2006 and 2005, respectively, and $1.9 million, $1.3 million and $35,000 in 2005, 2004 and 2003, respectively. The majority of the purchase of property and equipment in 2004 related to our moving to a different location, mostly funded by the landlord through lease incentives. The primary increase in the purchase of property and

equipment during 2005 was due to the construction costs of approximately $1.2 million for our pilot manufacturing facility for the pilot production of *PHA Natural Plastics*, co-funded through our alliance with ADM, and approximately $560,000 during 2005 and an additional $350,000 during the first six months of 2006 for the construction of a greenhouse to support our switchgrass program. We expect to make significant investments in the purchase of property and equipment to support our pilot manufacturing, formulating *PHA Natural Plastics* to their final form for commercial sale and other efforts. We estimate that we will use approximately $10 to $20 million of the proceeds of this offering to fund these investments.

Net cash provided by financing activities was $17.1 million and $4.5 million during the first six months in 2006 and 2005, respectively, and $5.0 million in 2005 and $5.8 million in each of 2003 and 2004. Financing activities consist primarily of proceeds from the sale of our preferred stock and promissory notes. We received net proceeds from the issuance of preferred stock of $17.4 million and $44.8 million during the first six months in 2006 and 2005, respectively, and $4.8 million, $6.5 million and $6.3 million in 2005, 2004 and 2003, respectively. Payments on a convertible promissory note and capital lease obligations were each of $417,000, $721,000 and $521,000 during 2005, 2004 and 2003, respectively.

Operating Capital and Capital Expenditure Requirements

We anticipate commercializing our first product through our alliance with ADM during 2008. However, we anticipate that we will continue to incur net losses for the next several years as we incur expenses to commercialize our *PHA Natural Plastics*, and expand our marketing, sales, manufacturing and corporate infrastructure.

We believe that our cash, cash equivalents and short-term marketable securities balances, and the interest we earn on these balances, as well as cash expected from our ADM alliance plus the proceeds of this offering, will be sufficient to meet our anticipated cash requirements with respect to the initial commercial launch of our *PHA Natural Plastics* for at least the next 24 months. If our available cash, cash equivalents and short-term marketable securities are insufficient to satisfy our liquidity requirements, or if we develop additional products, we may seek to sell additional equity or debt securities or obtain a credit facility. The sale of additional equity and debt securities may result in additional dilution to our stockholders. If we raise additional funds through the issuance of debt securities or preferred stock, these securities could have rights senior to those of our common stock and could contain covenants that would restrict our operations. We may require additional capital beyond our currently forecasted amounts. Any such required additional capital may not be available on reasonable terms, if at all. If we are unable to obtain additional financing, we may be required to reduce the scope of, delay or eliminate some or all of our planned research, development and commercialization activities, which could harm our business.

Because of the numerous risks and uncertainties associated with plant construction and commercialization of *PHA Natural Plastics*, we are unable to estimate the exact amounts of our capital and working capital requirements. We estimate our capital expenditures through completion of construction of the commercial manufacturing facility in 2008 to be in the range of $10 to $20 million to purchase property and equipment to support our pilot manufacturing and formulating *PHA Natural Plastics* to their final form for commercial sale and for research and development. Our future funding requirements will depend on many factors, including, but not limited to:

- continued funding and support payments from our key alliance agreement with ADM;

- the expenditures related to continued pilot production of *PHA Natural Plastics* during this period;
- costs related to the building of our formulation facility pursuant to the ADM alliance;
- successful commercialization commencement in 2008;
- our ability to scale our manufacturing operations to meet demand for *PHA Natural Plastics*;
- the revenue generated by sales of our *PHA Natural Plastics*;
- the expenses we incur in manufacturing, developing, marketing and selling our products;
- the costs and timing of additional regulatory approvals;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the rate of progress and cost of our product development activities;
- the requirements for the development and commercialization of *PHA Natural Plastics* produced in switchgrass and, perhaps, other crop platforms;
- the success of our research and development efforts;
- the emergence of competing or complementary technological developments;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish; and
- the acquisition of businesses, products and technologies, although we currently have no commitments or agreements relating to any of these types of transactions.

Off-Balance Sheet Arrangement

As of June 30, 2006, we had no off-balance sheet arrangements as defined in Item 303(a)(4) of the Securities and Exchange Commission's Regulation S-K.

Contractual Obligations

Our future contractual obligations primarily for future rental payment obligations on the current office and lab space, including financing costs, at December 31, 2005 were as follows:

	Payment due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**2-3 years**	**4-5 years**	**More than 5 years**
Operating lease obligations	$ 8,385	$ 988	$ 1,976	$ 1,977	$ 3,444
Capital lease obligations	$ 63	$ 63	$ 0	$ 0	$ 0
Purchase obligations	$ 250	$ 25	$ 50	$ 50	$ 125
Total	$ 8,698	$ 1,076	$ 2,026	$ 2,027	$ 3,569

Related Party Transactions

We have recorded license and royalty revenue from a related party and have an option grant to a related party. We also have various transactions with our alliance partner ADM, a related party. Additionally, the Company recorded as impairment charge on a related party investment. For a full description, see Note 8 to our notes to consolidated financial statements and the "Certain Relationships and Related Party Transactions."

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS No. 123R, which replaces SFAS No. 123 and supersedes APB No. 25. SFAS No. 123R will require all share-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values. The Company implemented SFAS No. 123R in the reporting period beginning January 1, 2006, which resulted in an immaterial effect on its stock compensation expense for the period ended March 31, 2006. The Company expects stock compensation expense to materially increase in future periods as a result of the adoption of this standard and future possible stock grant activity.

In April 2005, the FASB issued FASB Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations — an interpretation of FASB Statement No. 143* ("FIN No. 47"). FIN No. 47 expands on the accounting guidance of Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations* ("SFAS No. 143"), providing clarification of the term, conditional asset retirement obligation, and guidelines for the timing of recording the obligation. The interpretation is effective for fiscal years ending after December 15, 2005. The Company adopted FIN No. 47 and has recorded a long-term liability for its asset retirement obligations of $66,218, and an associated non-current asset of $64,615, at December 31, 2005 which represents the contractual obligations associated with the potential removal of a leasehold addition constructed during 2005.

In May 2005, the FASB issued Statement of Financial Accounting Standards No. 154, *Accounting Changes and Error Corrections*, a replacement of APB Opinion No. 20, *Accounting Changes*, and FASB issued Statement of Financial Accounting Standards No. 3, *Reporting Accounting Changes in Interim Financial Statements* ("SFAS 154"). SFAS No. 154 requires retrospective application to prior period financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. This statement requires that retrospective application of a change in accounting principle be limited to the direct effects of a

change. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005.

In July, 2006 the FASB issued Financial Accounting Standards Interpretation No. (FIN) 48, *Accounting for Uncertainty in Income Taxes*. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109. FIN 48 prescribes a recognition threshold and measurement attributable for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. FIN 48 is effective for fiscal years beginning after December 15, 2006. The adoption of this statement is not expected to have a material impact on our consolidated financial position or results of operations.

Quantitative and Qualitative Disclosures about Market Risk

We had unrestricted cash, cash equivalents, short-term investments and restricted cash totaling $16.4 million at June 30, 2006. The unrestricted cash and cash equivalents are held for working capital purposes. We do not enter into investments for trading or speculative purposes. Some of the securities in which we invest, however, may be subject to market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. To minimize this risk in the future, we intend to maintain our portfolio of cash equivalents and short-term investments in a variety of securities, including commercial paper, money market funds, debt securities and certificates of deposit. Due to the short-term nature of these investments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. As of June 30, 2006 all of our investments were held in money market accounts and short-term instruments.

BUSINESS

Overview

We are a leading biotechnology company that develops and plans to commercialize environmentally sustainable, economically attractive alternatives to petrochemical-based plastics, fuels and chemicals. Our strategy is to develop technology platforms that integrate advanced biotechnology with current industrial practice and to commercialize these platforms with industry leading strategic partners. Our first platform, which we will be commercializing through a strategic alliance with Archer Daniels Midland Company, or ADM, is a proprietary, large-scale microbial fermentation system for producing a versatile family of naturally occurring polymers known as polyhydroxyalkanoates, which we call *PHA Natural Plastics*. Our microbial fermentation system combines *e-coli* bacteria with corn sugar and other materials in a fermenter. The bacteria digests the corn sugar and produces *PHA Natural Plastics* inside of the bacteria. We separate the *PHA Natural Plastics* from the remainder of the bacteria and formulate the polymer into its final form for commercial sale. Through the alliance with ADM, we intend to sell these polymers as environmentally friendly, but functionally equivalent alternatives to petrochemical-based plastics in a wide range of commercial applications, including disposable goods, packaging, agricultural products, consumer goods and electronics. Also, as part of the strategic alliance with ADM, we have announced plans to build a 50,000 ton (approximately 110 million pounds) annual capacity commercial scale plant, or the Commercial Manufacturing Facility, that will produce biodegradable *PHA Natural Plastics* out of corn sugar, an abundant agriculturally-produced renewable resource. We are currently producing pre-commercial quantities of *PHA Natural Plastics* jointly with ADM at a pilot plant having a capacity of 10 tons per month. For a more detailed description of our relationship with ADM, see "Business—Fermentation Alliance with Archer Daniels Midland Company."

Our second technology platform, which is in an early stage, is a biomass biorefinery system using switchgrass to co-produce both *PHA Natural Plastics* and biomass feedstock for the production of ethanol. For this system, we are engineering switchgrass to produce *PHA Natural Plastics* in the leaf and stem of the plant. We intend to extract the polymer from switchgrass and use the remaining plant material as a biomass feedstock for the production of energy products including electricity and ethanol. Switchgrass is a commercially and ecologically attractive, non-food energy crop that is indigenous to North America and is generally considered to be a leading candidate for cellulose-derived ethanol production. We believe that using switchgrass to co-produce these products can offer superior economic value and productivity as compared to single product systems that produce them individually. We have been working on our biomass biorefinery platform using switchgrass with support from the U.S. Department of Energy and the U.S. Department of Agriculture for several years, and we believe we are a scientific leader in this field. Our goals for this program are to have commercially viable switchgrass varieties in pilot field trials within four years and to establish strategic alliances with attractive partners to commercially exploit this platform.

As demonstrated by our first two technology platforms, we take an integrated systems approach to our technology development. We are focused on developing entire production systems from gene to end product as opposed to developing specific technologies (for example, gene sequencing, shuffling or directed evolution) or singular aspects of a product's production (for example, providing a key enzyme, catalyst or ingredient). We believe this systems approach optimizes manufacturing productivity and, when commercialized, will enable us to capture more economic value from any platform that we pursue. We have core capabilities in microbial genetics, fermentation process engineering, chemical engineering, polymer science, plant genetics and botanical science, and we have assembled these capabilities in a way that has allowed us to integrate biotechnology with chemical engineering and

industrial practice. We believe that our approach can be applied to other products and chemicals to help establish and grow an environmentally sustainable chemical industry.

We intend to explore the opportunities to apply our core capabilities in microbial engineering and plant transformation to develop biological routes to other chemicals and chemical intermediates and to research switchgrass varieties with improved traits for higher yields and greater ease of conversion to fuels such as ethanol.

To exploit our first technology platform, we are working with ADM to build the Commercial Manufacturing Facility in Clinton, Iowa, which we expect will commence commercial production of *PHA Natural Plastics* in 2008. The facility will produce *PHA Natural Plastics* which are highly versatile and range in properties from strong, moldable thermoplastics to highly elastic materials and soft, sticky compositions. They can be made as resins or as latex with excellent film-forming characteristics. These properties allow for a wide variety of commercial applications, offering an environmentally-friendly alternative to petroleum-derived synthetic materials which are not biodegradable. Through the strategic alliance with ADM we intend to initially position *PHA Natural Plastics* as premium priced specialty materials catering to customers who want to match the functionality of petrochemical-based plastic, but add the dimension of environmental responsibility to their products and brands.

With ADM we have initiated product and business development activities including pilot production of material at a 10 ton per month scale facility, working with potential customers, and initiation of qualification trials of our material for selected customer applications. We expect that our products will initially be sold to companies that are:

- establishing themselves as leaders of the emerging market trend toward environmentally responsible products and services;
- addressing current or anticipated regulatory pressure to shift to more sustainable industry; or
- selling products where biodegradability is a key functional requirement.

We own over 320 issued patents and 100 patent applications world wide, and have licensed an additional 60 issued patents and 32 patent applications world wide. These patents cover, among other things, the fundamental biotechnology needed to produce *PHA Natural Plastics* as well as compositions, processes and derived products.

Market Opportunity

Emerging Issues Surrounding Petrochemicals

The markets for petrochemical-based plastics, fuels and chemicals are among the largest in the global economy. While these markets encompass a diverse array of products, they are all derived from fossil fuels, particularly petroleum and natural gas. The prolonged broad use of these petrochemical-based products has created several economic, social and environmental issues, including plastic waste management and pollution, rising fossil fuel prices, energy security and climate change. These issues have resulted in rising levels of interest in product alternatives that are renewable, sustainable and not dependent on fossil fuels.

Plastic Waste Management and Pollution — According to the U.S. Environmental Protection Agency, 26.7 million tons of plastic solid waste was deposited into the U.S. municipal solid waste ("MSW") stream in 2003. Plastics are a rapidly growing contributor to U.S. MSW, having increased from less than 1% in 1960 to over 11% in 2003. In spite of intensive efforts to promote collection and recycling, only 1.4 million tons of plastic or 5.2% of plastic solid waste was recycled that year. While the balance is deposited in land fills and waste treatment facilities, many plastic items, particularly single use items such as bottles and caps, cups, lids and straws, and grocery bags become litter in the environment where they can become a significant problem. Plastic waste can create a significant monetary burden on state and local governments. This situation has led California to consider legislation banning the use of such plastic items or imposing significant taxes on them.

Moreover, current disposal methods may have adverse consequences to people's health, safety and the environment. Most wastes are placed in landfills or burned in incinerators. The burning process may produce dioxins and other hazardous substances that are released into the environment. In addition, landfills are filling up and requiring more land sources. Though attempts to slow the growth of landfills have been attempted through recycling legislation, it is still recognized that other solutions will need to be pursued to address the problem.

The threat that petrochemical-based plastics pose to the marine ecosystem has been well documented. Recent studies have noted that the world's oceans show increasing levels of persistent plastic particles of a size ingestible by marine creatures at the bottom of the food chain. Larger plastic items are also accumulating in large quantities in certain parts of the ocean and marine birds and mammals have been found killed by ingesting or getting tangled in plastic debris. Los Angeles County is now under court order to clean up the plastic waste in the Los Angeles River, at an estimated cost of $2-$3 billion.

The Rising Cost of Fossil Fuel — According to the U.S. Department of Energy's Report on International Energy Outlook dated July 2005, worldwide demand for oil is expected to rise by over 50% from 78 million barrels a day in 2002 to 119 million barrels a day in 2025. World oil prices have increased from an average of $36 per barrel in 2004 to over $70 per barrel in 2006. Declining domestic production in the United States, higher demand in the developed world, rising demand in emerging markets, the increasing cost of drilling activities, underinvestment in infrastructure, and the increasing proportion of hydrocarbon reserves in politically unstable regions, are all stimulating an environment of rising and increasingly volatile oil and natural gas prices. The lack of substantial excess supply leaves the existing petrochemical market subject to the significant risk of supply disruptions or dramatically higher oil prices. According to the American Chemistry Council, approximately 9% of the oil and natural gas consumed in the United States is used in the production of plastics. Because fossil fuels are the primary feedstock for the plastics industry, polymer prices have also been experiencing increases in both level and volatility.

Energy Security — There is a growing view that developing alternatives to fossil fuel is a matter of national security. While the United States accounts for just 5% of the world's population and 2% of the world's oil reserves, the United States consumes 25% of world oil production. The majority of the U.S. oil needs are imported, with significant supplies coming from unstable parts of the world (the Middle East, Nigeria, Venezuela, and Russia), presenting risks to the economy and national security. Furthermore, oil is a finite resource, and there is growing evidence that the natural peak for production may occur within the next 20 years.

Climate Change — There is a growing scientific consensus that global climate change is occurring and that the rise in carbon dioxide emissions over the last 100 years has contributed to this situation. A significant source of CO_2 emissions comes from the use of fossil fuel. The broad acceptance of the

Kyoto protocol is evidence of the wide spread concern for global climate change in the industrialized world. In the United States, companies have started to account for carbon emissions, to prepare for carbon limits and credit trading schemes, and to seek solutions for reducing their carbon emission profile.

The Plastics Market

The plastics market is a large and global marketplace consisting of a broad range of polymer resins. The market includes several widely used, high volume commodity resins and numerous lower volume, higher performance resins targeting specialized end uses. Over the past forty years the plastics market has posted relatively consistent growth driven by a number of important fundamental factors including:

- Replacement of traditional materials (glass, steel, aluminum, paper) with lower weight, higher performance plastics;
- Increased health and safety requirements necessitating improved consumer packaging;
- Consumer demand for enhanced appearance and aesthetics which can be achieved with plastic materials; and
- Demand for more durable and functional materials in consumer durable and non durable products.

The growth in plastic use has generally been in line with overall economic growth as plastics have entered numerous new markets and product applications based on their functionality and ability to meet numerous user requirements. Plastics that perform well in extreme environment conditions and applications, offering good thermal and electrical insulating properties and corrosion resistance have been developed. By varying formulations and additive packages, plastic products can be produced in many shapes, sizes, colors and densities that satisfy specific application needs. Consequently, plastics are sold into a highly diverse set of markets including: electronics, automotive, furnishings, building and construction, textiles, packaging, and consumer products.

There are many different categories of plastics sold into the market today, but they are generally categorized into two broad groups: commodity polymers and specialty polymers. The most commonly known commodity polymers include polyethylene, polypropylene, polystyrene, PET and polyvinyl chloride. The commodity polymers are high volume resins which tend to be lower value added materials produced in volumes of tens of billions of pounds per year. According to SRI Consulting, in 2004, the total global consumption of commodity grade plastics constituted approximately 90% of the total plastics market on a volume basis and amounted to over 260 billion pounds. Specialty polymers fill niches within the broader plastics market by offering unique and tailored functionalities and characteristics that cannot be addressed by the commodity classes. In 2004 this category of plastic constituted just over ten percent of the total plastic market on a volume basis and amounted to over 35 billion pounds of consumed material. Some of the more widely known specialty polymers include polycarbonate, ABS (Acrylonitrile Butadiene Styrene), nylon and thermoplastic elastomers. Specialty polymer pricing varies widely based on the type of resin and the performance characteristics offered by the material. However, these resins are typically priced at a premium to commodity plastics and, according to Plastics Technology, were selling at values starting above $0.80 per pound and reaching as high, in some cases, as $3.60 per pound in June 2006. In contrast, the commodity grade resins were generally priced at less than $1.00 per pound at that time. Pricing has been volatile due to fluctuations in raw materials costs and supply/demand characteristics.

Fuels and Biofuels Markets

According to the U.S. Department of Energy's Report on International Energy Outlook July 2005, worldwide demand for oil is expected to rise by over 50% from 78 million barrels a day in 2002 to 119 million barrels a day in 2025. The issues surrounding petrochemicals discussed above have given rise to increasing demand for fuels produced from renewable sources. Biofuels such as ethanol and biodiesel are produced from renewable sources such as corn, sugar cane and rapeseed. In 2005, a record 4 billion gallons of ethanol was produced in the United States, an increase of 17% from 2004 and 126% since 2001. Even so, ethanol represented less than 3% of 140 billion gallons of gasoline consumed in the United States in 2005. In August 2005, the United States enacted the Energy Policy Act of 2005, creating a national Renewable Fuels Standard (RFS) to encourage increased usage of ethanol. With the enactment of the nationwide RFS, the United States has made a commitment to renewable fuels, such as ethanol and biodiesel. The Act establishes a baseline for renewable fuel use, beginning with 4 billion gallons per year in 2006 and expanding to 7.5 billion gallons by 2012. The vast majority of the renewable fuel used is expected to be ethanol, necessitating a doubling of the domestic ethanol industry in the next 6 years. In addition to rising gasoline and oil prices, other factors will contribute to increased demand for biofuels. Many states are considering legislation to capitalize on the environmental and energy security benefits of renewable fuels by requiring their use.

While ethanol is typically produced from starch contained in grains such as corn and grain sorghum, it can also be produced from cellulose. Cellulose is the main component of plant cell walls and is the most common organic compound on earth. The production of ethanol from corn is a mature technology that is not likely to see significant reductions in production cost. The ability to produce ethanol from low-cost biomass will be an important factor in making it competitive as a gasoline additive. The Energy Policy Act 2005 provides that beginning in 2013, a minimum of 250 million gallons a year of cellulosic derived ethanol must be included in the RFS. It also creates grant and loan guarantee programs for cellulose ethanol.

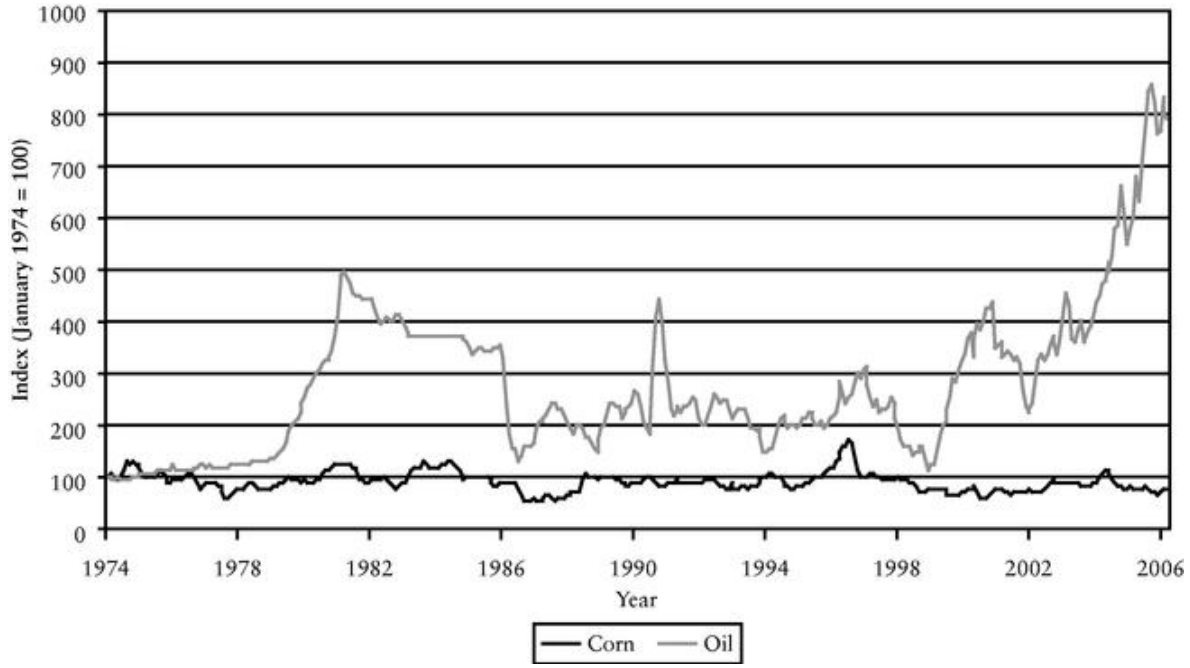
The Metabolix Solution

We have developed and plan to commercialize an economically attractive, environmentally sustainable alternative to petrochemical-based plastics that is both biodegradable and functionally equivalent to traditional petrochemical-based plastics. The use of a renewable agricultural feedstock as a manufacturing input and the biodegradability of *PHA Natural Plastics* can potentially address many of the issues associated with petrochemical-based products. Our *PHA Natural Plastics* degrade into water and carbon dioxide.

A Solution to Plastic Waste and Pollution from Persistent Plastics — *PHA Natural Plastics* are biodegradable under a wide variety of conditions and therefore offer new options for addressing the burdens of traditional plastic solid waste on the municipal waste stream and the dangers posed within the marine ecosystem. For example, *PHA Natural Plastics* will decompose in landfills where air, moisture and bacteria are present. They will also rapidly decompose in the biologically intense environment of a waste treatment facility and will degrade when flushed into household septic systems. They are recyclable and can be cleanly incinerated, and can also be degraded in industrial or backyard composting environments. *PHA Natural Plastics* will also biodegrade in aquatic environments, and so offer a solution to the hazard of persistent plastics in wetland, river, coastal, and ocean ecosystems. It is critical to note, however, that *PHA Natural Plastics* are functionally durable and do not spontaneously degrade in cold, hot or wet conditions.

Leveraging the Stability of Agricultural Commodity Pricing — Our use of corn sugar as a feedstock to produce PHA Natural Plastics reduces the reliance on fossil fuel as the primary input source, thus significantly addressing the effects of the increasing cost of fossil fuel. The prices of agricultural commodities, and corn in particular, have been relatively stable during the past few decades compared to the price of fossil fuel, which has significantly increased over the same period. We believe that polymers based on agricultural feedstocks, such as *PHA Natural Plastics*, may experience a more predictable cost structure and may become competitive to traditional petrochemical-based polymers over time. The chart below shows that over the past 32 years, the price of corn has remained relatively stable while the price of oil has been volatile and has risen by approximately eight times. Furthermore, even if pricing dynamics for corn and corn sugar change from past experience, we believe the volatility of oil prices will provide an incentive to diversify feedstocks.

Comparison of Oil and Corn Prices (January 1974 to March 2006)



Sources: Monthly Crude Oil Prices, January 1974 to March 2006; Energy Information Administration
Monthly Corn for Grain Prices, January 1974 to March 2006; USDA National Agricultural Statistic Service

Reducing Dependency on Foreign Energy — We believe the widespread use of our *PHA Natural Plastics* can help lower the United States' exposure to oil imported from politically unstable countries. In addition, we believe that the PHA-producing switchgrass which we intend to develop offers the United States an additional opportunity in biofuels production, which currently is focused primarily on corn-based ethanol. We estimate that an annual crop of 159 million tons of PHA-producing switchgrass could produce fuel equivalent to one million barrels of oil per day, approximately 5% of current U.S. oil consumption, as well as 15 million tons of polymer per year.

Decreasing Carbon Dioxide Emissions — We believe that the widespread use of our *PHA Natural Plastics* can not only decrease the use of fossil fuel but also can reduce the emission of carbon dioxide into the atmosphere. While the production of *PHA Natural Plastics* produces carbon dioxide, both the agricultural production of corn feedstock for microbial fermentation and the direct production of *PHA Natural Plastics* in plants such as switchgrass have the added benefit of removing carbon dioxide from the environment through photosynthesis. While fermentation processes do require electricity which

may be generated by carbon dioxide emitting sources, the increasing availability of clean power (such as biomass, cogeneration, wind or solar power) is an attractive alternative to employ as the business develops.

History of *PHA Natural Plastics* and Formation of Metabolix

Polymers are found in nature in a wide range of organisms including bacteria, plants and in some animals. Polyhydroxyalkanoates, or PHAs, which we call *PHA Natural Plastics*, also naturally occur within certain organisms, including bacteria. PHA was first isolated from *Bacillus megaterium* by Maurice Lemoigne at the Institute Pasteur in 1925. Lemoigne determined that these bacteria use PHA as a store of energy and consume it for food in times of famine. It is this characteristic that gives PHA its biodegradability in the environment.

Though PHA polymers are found in nature, their production in wild-type bacterial strains is inefficient and costly for commercial purposes. In 1981, Imperial Chemical Industries, or ICI, developed a controlled fermentation process using a wild-type bacterial strain to produce a PHA copolymer that they introduced under the trade name Biopol. While a handful of applications were developed for Biopol, the cost to produce the polymer was prohibitively high using the naturally occurring bacterial strains that were available at the time. Commercialization was not possible, but the Biopol assets remained largely intact and were eventually sold to Monsanto, Inc.

By the late 1980s, tools for genetic engineering had advanced substantially. Bacteria were already being genetically designed to produce various products, such as protein drugs. At the Massachusetts Institute of Technology, Dr. Oliver Peoples, our Chief Scientific Officer, working in the lab of Dr. Anthony Sinskey, a member of our Board of Directors, identified the key genes required for the biosynthesis of *PHA Natural Plastics* and invented and patented the first transgenic systems for their production. The use of genetically engineered production organisms, instead of wild-type strains, broadly expanded the number of compositions that could be made and enabled the tight level of control and high efficiency and productivity that are required for cost-effective industrial manufacturing.

We were formed in 1992 to exploit these discoveries. In order to fully capture the opportunity, we also acquired Monsanto's patent estate which relates to *PHA Natural Plastics*, which included the Biopol assets, in 2001. We have since fully developed an integrated manufacturing process including both transgenic strains and a proprietary recovery process that have been demonstrated to work in commercial equipment.

Business Strategy

Our goal is to be the leader in discovering, developing and commercializing economically attractive, environmentally sustainable alternatives to petrochemical-based plastics, fuels and chemicals. To achieve this goal, we are building a portfolio of programs that we believe will provide not only an attractive slate of commercial opportunities but also will generate leading and competitive intellectual property positions in the field. Key elements of our strategy include:

Establishing Production of PHA Natural Plastics — We have put into operation a 10 ton per month capacity pilot manufacturing facility to produce *PHA Natural Plastics* to seed the market, and as part of our strategic alliance, ADM and Metabolix have announced plans to build a 50,000 ton annual capacity Commercial Manufacturing Facility to produce *PHA Natural Plastics*. The ADM site in Clinton, Iowa is being designed, engineered and is expected to be built to accommodate significant expansion beyond its initial capacity. We anticipate that commercial production will commence in 2008.

Market Positioning and Sales — We are building a marketing and sales team to educate and develop our prospective customer base. This team will focus on positioning *PHA Natural Plastics* as premium priced, specialty materials that are environmentally attractive alternatives to petrochemical-based plastics. We intend to build a brand around *PHA Natural Plastics* consistent with this positioning and will seek to co-brand *PHA Natural Plastics* with our customers. The focus of this effort will be to build a pipeline of approximately 100 customer prospects across a range of applications, and presently we have ongoing relationships with over 30 customer prospects for approximately 50 different applications. Our goal is to dedicate a substantial amount of our commercial production capacity to these customers before the Commercial Manufacturing Facility commences operations.

Continuing Microbial Research and Process Development — We have identified opportunities to improve our production strains and our fermentation and recovery processes. We believe that significant reductions in the cost to manufacture *PHA Natural Plastics* can occur as we successfully exploit these opportunities. We also believe that as we acquire more experience with manufacturing our products at commercial scale, we will identify further improvements we can make.

Developing Applications for PHA Natural Plastics — We have developed formulations of our polymer suitable for injection molding, casting film and sheet, thermoforming and paper coating. These grades will be refined further to tailor them for specific customer performance requirements and additional grades will be developed for other applications. In addition, we will develop new formulations and processing protocols to extend the applications into which we can sell our products. Specific areas of work will include: foam, blown film, blow molded bottles, stretch wrap and fiber.

Advancing Switchgrass Research and Other Plant Strains — We believe that we are pioneering the technical process of introducing traits to switchgrass for the production of *PHA Natural Plastics* directly in the plant. Our switchgrass platform is currently in the research phase. In order to achieve a commercially attractive system, we intend to further improve our plant strains to achieve high levels of *PHA Natural Plastics* content by weight. We also intend to research introducing traits to increase crop yields in terms of tons per acre, and enhance biomass processability for the production of ethanol.

We intend to explore additional crop varieties that offer attractive commercial opportunities. These may include rapeseed, which is suitable for northern climates and can co-produce *PHA Natural Plastics* along with bio-diesel feedstock and sugar cane, which is suitable for tropical climates and can co-produce *PHA Natural Plastics* along with ethanol feedstock.

Partnering our Switchgrass Program — As we have done with ADM for our microbial fermentation platform, we will seek to leverage our technology and establish strategic partnerships with one or more industry leading companies that can provide access to resources and infrastructure valuable for commercializing this platform. At the same time, we will seek an arrangement that allows us to retain an attractive share of the economic value of the project. In order to fund continued development, we intend to actively pursue grants from the government for our switchgrass program.

Building Governmental Awareness of Our Approach — Policy makers are seeking opportunities to reduce dependence on imported fossil fuel, decrease carbon dioxide emission and address landfill and pollution issues. We intend to continue to build our governmental affairs initiatives. We believe that higher awareness of our solution may result in opportunities to obtain additional funding or legislative support that can facilitate and accelerate the adoption of our products.

Extending Our Technology to Sustainable Production of Large Volume Chemicals and Intermediates — Our technical capabilities can be applied to produce a number of important

commercial chemicals and chemical intermediates through biological conversion of sustainable feedstocks such as sugars.

Furthering our Leading and Competitive Intellectual Property Position — We have built a patent estate around our platform technologies and a variety of inventions relevant to the commercialization of *PHA Natural Plastics*. We are extending this patent estate within our core business as well as to other commercial opportunities in the area of bio-based plastics, fuels and chemicals. Some of the areas in which we may seek to establish leading and competitive intellectual property include:

- intermediates and chemicals produced by microbial fermentation;
- fermentation products for nutraceutical applications;
- alternate plant varieties to co-produce *PHA Natural Plastics* and fuels (ethanol and biodiesel); and
- switchgrass strains that optimize crop yields and processing traits for conversion to fuels.

Fermentation Alliance with Archer Daniels Midland Company

On November 3, 2004, we entered into a strategic alliance with ADM Polymer Corporation, a wholly-owned subsidiary of ADM, one of the largest agricultural processors in the world. The strategic alliance has three phases, which are described below and include: (i) a Technology Alliance Phase, (ii) a Commercial Alliance Phase and (iii) a Joint Venture Phase.

Technology Alliance Phase — The purpose of this phase, which has been achieved, was to determine whether our process for fermenting and recovering *PHA Natural Plastics* could achieve certain performance benchmarks in commercial scale equipment and to prepare a master plan and preliminary budget for the construction of the Commercial Manufacturing Facility. In November of 2004, we received a $3.0 million upfront payment from ADM, and in May 2006, we received $2.0 million in milestone payments associated with the achievement of Technology Alliance goals.

Commercial Alliance Phase — The purpose of this phase is to build the Commercial Manufacturing Facility, to market and sell *PHA Natural Plastics* through a separate legal entity owned equally by each of Metabolix and ADM Polymer, which we refer to as the Joint Sales Company, to make arrangements for the financing of the operation and to allocate distributions of cash flow.

On July 12, 2006, ADM exercised its option to enter into the Commercial Alliance. During the Commercial Alliance Phase, ADM will take responsibility for and will finance construction of the Commercial Manufacturing Facility, which it will own and contract on a dedicated basis to the Joint Sales Company. In addition, ADM will finance the working capital requirements of the Joint Sales Company. We are responsible for formulation operations and investing in formulation equipment, and we will take responsibility for continuing research and development. In addition, we will lead the sales and marketing efforts on behalf of the Joint Sales Company until completion of the construction of the Commercial Manufacturing Facility. At that time, the Joint Sales Company will assume control of such activities. The Joint Sales Company will make up to twelve quarterly payments of $1.575 million to us to support these activities during the construction of the Commercial Manufacturing Facility. The first two such payments totaling $3.15 million was received in July 2006. Subsequent payments will become due and payable on the first business day of each successive calendar quarter during the construction of the Commercial Manufacturing Facility. In the event construction is completed and sale of commercial product commences prior to the Joint Sales Company making all twelve such payments,

the quarterly payments will cease, and the Joint Sales Company will pay us a lump sum equal to the number of remaining unpaid payments multiplied by $250,000.

Upon the commencement of commercial sales, the Joint Sales Company will pay royalties to us for all *PHA Natural Plastic* sold by the Joint Sales Company. The Joint Sales Company will also pay manufacturing fees to ADM for production of *PHA Natural Plastics* and will pay formulation fees to us for certain formulation services. The Joint Sales Company will compensate ADM and us for services that we each may provide to the Joint Sales Company under separate service agreements. For example, we anticipate that we may provide research, development, marketing and sales services to the Joint Sales Company under such a service agreement.

ADM will construct, finance, own and operate the Commercial Manufacturing Facility through a manufacturing agreement with the Joint Sales Company. Even though the Joint Sales Company is a separate legal entity owned equally by each of Metabolix and ADM Polymer, ADM will disproportionately fund the activities of the Joint Sales Company subject to certain limitations. In order to rebalance the respective investments made by the parties, a preferential distribution of cash flow will be used, whereby all profits, after payment of all royalties, reimbursements and fees, from the Joint Sales Company will be distributed to ADM until ADM's disproportionate investment in the Joint Sales Company, and the costs of constructing the Commercial Manufacturing Facility, have been returned to ADM. Once ADM has recouped such amounts, the profits of the Joint Sales Company shall be distributed in equal amounts to the parties.

Our agreements with ADM limit ADM's and our right to work with other parties, or alone, in developing or commercializing *PHA Natural Plastics* through fermentation. These agreements do not, however, limit our right to develop, manufacture or sell *PHA Natural Plastics* produced through plants such as switchgrass (rather than through fermentation) outside of the Joint Sales Company.

These agreements also include detailed provisions setting out the rights and obligations of the parties in the event of a termination of the Commercial Alliance. These provisions include the right of the parties to terminate the Commercial Alliance upon a material default of a material obligation by the other party after a notice and cure period has expired. The parties are also permitted, under limited circumstances, to terminate the Commercial Alliance if a change in circumstances that is not reasonably within the control of a party makes the anticipated financial return from the project inadequate or too uncertain. Finally, the parties have specific obligations to fulfill in the event of termination or if they file for bankruptcy protection.

Joint Venture Phase — When market demand exceeds the capacity of the Commercial Manufacturing Facility and the initial license granted by us, ADM has the option to form a new entity owned equally by each of Metabolix and ADM Polymer with us to build additional capacity and expand the commercial operation beyond the limits of the initial production capacity. Under certain circumstances, if ADM does not exercise its option, then Metabolix would have an opportunity to manufacture and sell *PHA Natural Plastics* outside of the Commercial Alliance.

License Agreement with Massachusetts Institute of Technology

On July 15, 1993 we entered into an exclusive license agreement with Massachusetts Institute of Technology. The license covered intellectual property rights claiming inventions relating to our core genetic engineering technology as described in several patent applications and invention disclosures. The MIT license has been amended three times to add or subtract specific patent applications to the rights licensed to us. The MIT license was amended a fourth time to clarify certain rights relating to the right to grant sublicenses.

The MIT license is a world wide exclusive license. The license does not expire until the expiration of the last patent within the licensed patent rights. The license is subject to termination by either party upon an uncured material breach by the other party. Under the license we are required to pay a royalty to MIT based on net sales of products or services covered by a patent that is subject to the license and to share proceeds received from third parties in connection with the grant of a sublicense of rights granted under the license.

The MIT license contains other terms that are customary for university licenses, including without limitation, provisions relating to reporting requirements, patent prosecution, and indemnification.

Metabolix *PHA Natural Plastics* Target Markets

We believe *PHA Natural Plastics* from fermentation is the first of several attractive opportunities we will pursue to meet the world's plastic, fuel and chemical needs through the biological conversion of renewable and sustainable agricultural feedstocks. We believe *PHA Natural Plastics* possess comparable functional properties to petrochemical polymers serving applications that cover as much as half of the global polymer market. Our strategy is to enter this market with premium priced products that address specialized segments that can be served competitively by *PHA Natural Plastics*' distinctive properties.

Market Segments

We initially intend to target three market segments: branded products, regulated markets and products requiring biodegradability as a key functional property.

Branded Products — The market for branded products and services with attributes of environmental responsibility and sustainability is an emerging business opportunity. We intend to brand *PHA Natural Plastics* and we expect that by co-branding with products that use our *PHA Natural Plastics* we and our customers will be able to jointly promote environmental sustainability. Numerous companies have begun to position themselves and their products as more environmentally responsible. Some recent and well publicized examples of this include:

- General Electric's "Ecomagination" initiative;
- Wal-Mart's 21st Century Leadership environmental initiative;
- Toyota's success with hybrid gasoline electric vehicles;
- General Motor's "Flex-Fuel" vehicle initiative;
- Hewlett Packard's decision to cease using plastics flame retarded with halogen-containing compounds; and
- Whole Foods Markets purchase of renewable energy certificates (REC) sufficient to be the first Fortune 500 company to be entirely green-powered.

We believe that producers are positioning products as environmentally responsible or superior to gain a competitive advantage as producers believe consumer preferences are shifting. We believe the use of *PHA Natural Plastics* in branded products either directly or for packaging will facilitate and enhance our customers' efforts to exploit this trend.

Regulated Markets — Regulatory action, such as bans, taxes, subsidies, mandates and initiatives, to encourage substitution of renewable and sustainable materials for incumbents is rising. Examples of this can be found in the following jurisdictions:

- Taiwan and India have placed outright bans on plastic bags.
- Ireland has placed a 15 Euro cent tariff on plastic bags.
- Germany has a 1.30 Euro/kg levy on plastic packaging that is non-biodegradable. In addition, Europe requires original equipment manufacturers to take back certain products at the end of life and manage their disposal.
- In the United States, the federal government has been advancing bio-based material purchasing initiatives by government entities.
- In California, legislative action has been emerging to levy taxes on the use of disposable packaging.
- The U.S. government recently announced $150 million dollars of funding within the 2007 budget to build biomass biorefineries.

In the geographic segments where regulatory changes occur, our *PHA Natural Plastics* can meet requirements for bio-based content or biodegradability that favor *PHA Natural Plastics* over conventional petrochemical-based plastics. In addition, producers are now anticipating regulatory change and are initiating programs to introduce sustainable materials into their products prior to or in an attempt to forestall implementation of such regulation. We believe that as awareness of our practical and affordable alternative grows, the pace of regulatory change may accelerate.

Products Requiring Biodegradability — There are a number of applications for which biodegradability will be a key functional property. These markets consist largely of agricultural and construction applications, where the employment of implements and materials that decay naturally after use can increase efficiency, simplify cleanup and reduce disposal cost. While there are biodegradable offerings on the market today, we do not believe that existing products provide both the robust performance in use combined with the degradation in a variety of conditions that *PHA Natural Plastics* offer. For example, some materials break down quite rapidly when exposed to water and would not be durable enough if used in agricultural applications. Other materials will only degrade in hot compost environments. *PHA Natural Plastics*, however, can be engineered to provide months of use in the environment and then be plowed under the soil or left on-site to decompose over time in normal soil conditions where bacteria are present. Potential applications in this segment include:

- Mulch film;
- Erosion control netting;
- Single season irrigation devices;
- Stakes; and
- Plant pots.

Product Applications

To approach these market segments, we have developed four initial classes of functional formulations: injection molding, casting film and sheet, thermoforming and paper coating. We have begun product and business development activities, including working with potential customers to determine their specific needs, and we have begun the process of qualifying our material for a myriad of customer applications. Presently, we have ongoing relationships with over 30 customer prospects for approximately 50 different applications. We are actively developing additional customer prospects to qualify our products in the following application areas:

Segment	Examples of Application	
Single Use Disposables	• Hot cups (paper and plastic) • Lids • Dinnerware	• Single serve coffee packs • Utensils • Golf tees
Packaging	• Caps and closures • Food wrap • Detergent sachets • Food jars and tubs • Beverage cartons	• Cosmetics cases • Stretch wrap • Bags • Foam
Agriculture & Erosion Control	• Degradable stakes • Degradable erosion control netting	• Degradable mulch film • Degradable plant pots
Consumer Products	• Personal hygiene products	• Flushable household products
Electronics	• Cell phone housings	

To serve these market opportunities, we have developed formulations of *PHA Natural Plastics* that can be processed in conventional petrochemical-based plastics processing equipment for injection molding, casting film and sheet, thermoforming and paper coating. We have demonstrated our materials in prototyping trials internally and in some cases shared them with our customer prospects. We also have plans to develop additional formulations to address the market segments above. We are presently working on a $1.0 million contract awarded by the U.S. Department of Defense to develop formulations suitable for packaging foam and stretch pallet wrap. We also have plans to explore formulations for producing blown film, blow molded bottles and fiber.

Marketing and Sales

Initially, we will be leading the marketing and sales effort on behalf of the Joint Sales Company. Sales of *PHA Natural Plastics* will be highly technical in nature. Our expertise in polymer science combined with our familiarity with the properties of the PHA family of polymers will be essential to developing resin grades that meet specific customer requirements. We will also conduct joint marketing and sales efforts with ADM through the Joint Sales Company. ADM is a world leader in agricultural processing and fermentation technology and is one of the world's largest processors of corn, soybeans, wheat and cocoa. ADM is also a leader in the production of ethanol and corn sweeteners. With a strong existing customer base, we expect that ADM will provide sales prospects for the alliance.

It is our goal to have established customer relationships to dedicate a substantial portion of the Commercial Manufacturing Facility's initial output before production starts in 2008. To this end, we are expanding our product development team and commencing efforts in applications development, pilot manufacturing, marketing and sales. At present, we have ongoing efforts with over 30 different

customers for 50 different applications. We intend to build a pipeline of approximately 100 customer projects to maximize our production and marketing opportunities to fill the plant to capacity.

We are currently focusing our efforts on applications in the areas of injection molding, casting film and sheet, thermoforming and paper coating. We have developed prototype grades for each of these applications and have delivered small quantities of material to customer prospects for initial testing. If such tests are successful, we would expect some of our customer prospects to evaluate additional volumes of *PHA Natural Plastics* in larger scale product qualification trials and test marketing, which in turn may lead to product adoption and sales.

We intend to brand the *PHA Natural Plastics* and, where possible, to co-brand the materials with products that incorporate them. Prospective buyers of *PHA Natural Plastics* are seeking not only the functional properties they provide but also the progress toward sustainability, renewability and environmental responsibility they confer upon the products made or packaged with them. This will enable our customers to convey environmental responsibility to their end consumers by referencing our brand with their product. We have an ongoing effort to design branding ideas and conduct market research on them.

PHA Natural Plastics will initially be positioned as specialty materials that serve both a functional need (which petrochemical polymers may satisfy) and a social need (which petrochemical polymers cannot address). Consequently, we expect the Joint Sales Company to price *PHA Natural Plastics* as specialty products at a premium to the prices of large volume commodity polymers but comparable to a number of specialty polymers. The business model for positioning products with an environmental benefit at higher price points is increasingly prevalent with examples in several different industries ranging from retail food stores to gasoline-electric hybrid automobiles.

Through the strategic alliance with ADM, we intend to sell *PHA Natural Plastics* into markets around the globe. We intend to establish marketing and sales efforts either directly or through regional alliances with local firms in the Far East and Europe. We will also consider selected market development arrangements in certain discrete segments (fiber, for example) where there may be advantages to working exclusively with a market leader in that segment.

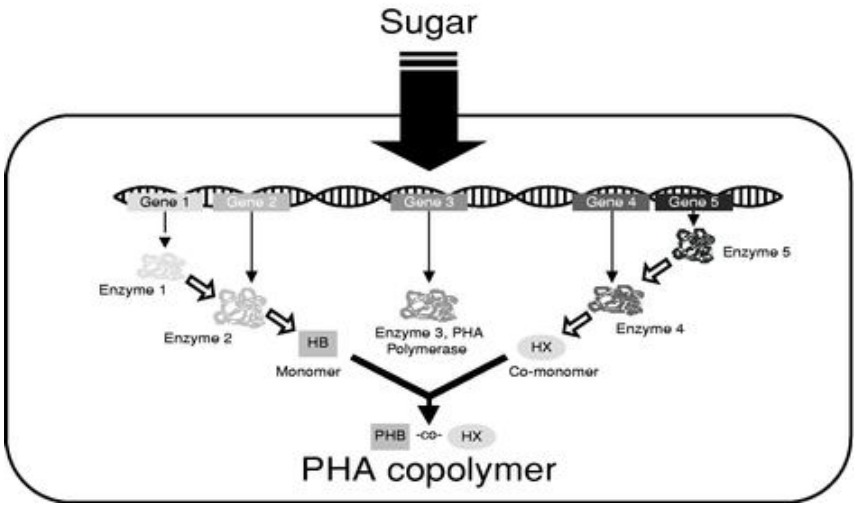
Our Technology and Product Development Process

We believe we have one of the most advanced capabilities to perform metabolic pathway engineering in the world and that we are skilled in our ability to integrate the biotechnology we develop into large scale industrial production processes. We believe that our advanced capabilities will allow us to:

- design and engineer living organisms to perform a series of chemical reactions that convert a feedstock to an end product in a highly efficient and reliable manner;
- incorporate that organism into a reliable, large scale industrial process; and
- tailor our end product from that process to suit our customers' needs.

Biology and Genetic Engineering — Today, biotechnology is used extensively for the production of protein-based drugs and enzymes. To produce these materials, a new gene is inserted into the DNA of a host organism, usually *e-coli* bacteria, the workhorse of the pharmaceutical industry. When that gene is expressed (i.e., turned on) the cell will produce the desired protein that is associated with the inserted gene. We have taken this process several steps further. In order to convert sugar to a polymer, the sugar molecule must undergo not one but several chemical alterations to turn it into a monomer,

the precursor to plastic. To execute all these reactions, we have encoded not one but several genes into the host DNA to produce each of the enzyme catalysts necessary for each step in the process. These genes come from multiple microbial sources and are selected for optimum performance using proprietary screening technology that we have developed. In addition to producing the monomer from sugar, depending on the kind of polymer desired, another feedstock may also be processed through a series of steps, requiring different genes and enzymes, to produce a different monomer. The two monomers are then joined together, or polymerized, by yet one more genetically produced enzyme. These are complex multi-gene systems, and we integrate them directly into the genome of the organism to enhance its stability under what are rigorous operating conditions. Our process creates a complete biological system where all of the reactions to convert feedstock into polymer take place within the cell, essentially creating a biofactory. So, while most biotechnology products today involve identifying a single gene to produce one protein, we have identified and chromosomally inserted a series of genes to produce several proteins and have done so in such a way that they are expressed in a concerted and harmonious fashion to execute the right reactions at the right times in a reliable way. We are not aware of other efforts in this field that have executed metabolic pathway engineering to this level of sophistication and with the level of success that we have experienced. The illustration below shows a schematic of our multi-gene system to produce *PHA Natural Plastics*.



Industrial Fermentation Process Engineering — We also have important capabilities in industrial fermentation process engineering that we incorporate into our technology development process. Simply engineering a bacterial strain to convert sugar to polymer is insufficient because the conditions present in a laboratory bench scale experiment are considerably different than those present in an industrial scale manufacturing operation. Not only are there variable operating conditions (such as temperature, pressure, oxygenation and distribution of nutrients), but also the microbe must grow and uniformly multiply over 400 billion times to fill up a 100,000 gallon industrial reactor. We have tightly integrated our fermentation scale-up research capabilities with our genetic engineering capabilities to create a feedback loop where data from fermentation experiments can readily influence microbial design and where microbial engineering approaches can guide the fermentation group to structure the optimal protocols (recipes) for running fermentations.

Chemical Process Engineering — The third element of our technology and product development process involves sophisticated process chemistry and chemical engineering to separate the polymer from the biological cell material once fermentation is complete. We have a dedicated team that has developed a proprietary process for *PHA Natural Plastics* recovery at the industrial scale. We have invented a process that achieves a high level of purity without damaging the polymer and that we believe can be implemented cost effectively at commercial scale. In work recently completed with ADM, we successfully demonstrated our ability to efficiently isolate polymer from the cell debris, clean and dry the polymer and prepare it for processing into pellets, its final form.

Polymer Science and Product Development — The final element of our product development involves tailoring the polymer to provide the product properties and meet the processing requirements for specific customer applications. Typically, this work involves establishing which combination and ratio of comonomers is best suited for the target application, modifying and blending individual polymer grades, blending the pure polymer with additives such as nucleating agents, plasticizers, fillers and other materials to optimize performance properties, and finally designing processing protocols to successfully convert the material to its target form. When the composition and blend is right, the material will flow, form, crystallize or otherwise process into its end state with the customer's desired properties at an attractive conversion cost. Our product development team has considerable expertise in polymer science and to date has developed blends suitable for injection molding, casting film and sheet, thermoforming and paper coating. In the future, we have plans to create formulations for blown film, blow molding, foam and fiber.

In sum, we have successfully integrated capabilities in biology, genetics, fermentation process engineering, chemical engineering and polymer science. We believe this integrated set of capabilities will be a source of competitive advantage. These same capabilities are being applied to our switchgrass program where we intend to develop an industrial system to produce not only *PHA Natural Plastics* but also cost advantaged biomass for ethanol production. We believe our capabilities can also be applied successfully to other bio-based plastics, fuels and chemicals projects.

Research & Development

We have a long standing and ongoing research and development program that is designed to exploit our systems approach to industrial biotechnology. While some biotechnology companies develop platform technologies (genomics, DNA synthesis, shuffling and directed evolution for example) or focus on singular aspects of a product's production (providing a key enzyme, catalyst or ingredient), we are focused on developing entire production systems from gene to end product. We believe that the technical challenges of successfully deploying biotechnology in industrial settings are high and that systems developed in an integrated and comprehensive environment will generate the optimum possible results and provide us with a competitive advantage. Furthermore, we believe fully developed, commercially viable processes will command higher values from potential partners than individual components or technologies.

The primary goals of our research and development program are to:

- drive down the cost of producing *PHA Natural Plastics* by microbial fermentation;
- expand the market applications into which *PHA Natural Plastics* can be sold;
- introduce a switchgrass production system that can dramatically transform the markets for plastics and fuels;

- develop new opportunities to produce plastics, fuels and chemicals in either fermentation or plant based systems; and

- develop and acquire competitive intellectual property and know-how in bio-based plastics, fuels and chemicals that defines us as the leader in the field.

Our research and development efforts are presently focused in three critical areas:

Microbial Fermentation — We have ongoing strain development efforts to develop microbes that can produce higher yields of *PHA Natural Plastic* at lower cost than our current strains. We have identified specific projects that we believe will allow us to approach the maximum theoretical productivity of these systems. In addition, we are engaged in strain development work to facilitate production of other members of the PHA polymer family that will allow us to extend the range of market applications we can address. This work will be combined with our ongoing product development effort, which is broadening the range of formulations we can make with our lead polymer composition.

Polymer Producing Plants — We are developing a technology to produce *PHA Natural Plastics* directly in plants, specifically targeting switchgrass. This effort builds on our success in creating high productivity microbial biofactories and may enable the production of *PHA Natural Plastics* with economics that are as or more favorable than general purpose commodity plastics such as polyethylene, polypropylene, and polystyrene.

New Systems and Products — We plan to further apply our platform technologies to other commercial opportunities in the area of bio-based plastics, fuels and chemicals. We have an ongoing effort to evaluate new program opportunities in the following areas:

- Key chemicals and chemical intermediates based on fermentation or production in plants such as switchgrass;

- Fermentation products for nutraceutical applications;

- Alternate plant varieties for production of *PHA Natural Plastics* and fuels that are suitable for other geographic climate zones; and

- Enhancement of switchgrass strains to improve crop yields and processing traits for conversion to biofuels.

We currently employ 31 personnel conducting research and development for our programs. Among our research staff, 12 hold Ph.D.s and 16 hold masters or bachelors degrees in their respective disciplines. Our staff has expertise in the following areas: microbial genetics, bioinformatics, metabolic engineering, systems biology, plant genetic engineering, fermentation process engineering, chemical engineering, and polymer science and engineering.

We supplement our internal resources by collaborating with outside parties including universities for specific targeted projects and over the last several years have sponsored targeted research projects at these as well as other institutions:

University of Massachusetts at Lowell
University of Munster
University of Calgary
Oak Ridge National Laboratories and National Renewable Energy Laboratories

Switchgrass Biomass Biorefinery Program

We are developing a breakthrough technology to produce *PHA Natural Plastics* directly in plants. This effort builds on our success in creating high productivity microbial bio-factories and offers the potential to produce *PHA Natural Plastics* at comparable or lower costs than the current cost of producing commodity petrochemical-based plastics such as polyethylene, polypropylene, and polystyrene. We are presently focusing our efforts on switchgrass, a commercially and ecologically attractive, non-food energy crop that is indigenous to North America. We believe we can engineer a system that co-produces *PHA Natural Plastics* along with biomass for conversion to fuels (such as ethanol) or energy. We believe the co-production of *PHA Natural Plastics* with energy in one system will offer superior economic value and productivity to a single product system. We have received significant funding from the United States Government as well as from BP for these efforts. We have also performed work on rapeseed for co-production of *PHA Natural Plastics* along with biodiesel fuel.

Switchgrass is an attractive biomass to energy crop that is generally considered to be a leading candidate for cellulose-derived ethanol production. It is a high density perennial crop that can grow on marginal land and does not require substantial inputs in terms of water or fertilization. It has the capability of sequestering significant amounts of carbon dioxide from the atmosphere in its root systems. It was the dominant plant species over the Great Plains of the United States prior to the introduction of modern agriculture and sometimes referred to as prairie grass. Switchgrass is found from the eastern United States west to Montana and Arizona, Canada and Mexico.

We believe we are a leader in the science and technology related to the transformation of switchgrass. Precise insertion of novel pathways in switchgrass is challenging due to the tendency of plants to eliminate foreign genes and due to the lengthy time required for cross-breeding of plant generations having new genes. We have developed several proprietary approaches to more efficiently introduce complex, multi-gene, multi-step pathways into switchgrass and we expect that these approaches will have value outside of the PHA family of products. For example, we believe we can introduce traits into switchgrass that can improve the yield of switchgrass per acre as well as enhance its processability for conversion to fuel.

We have already achieved several significant milestones in this program and can produce small amounts of *PHA Natural Plastics* in switchgrass. Our research is currently focused on increasing *PHA Natural Plastic* production levels to amounts we believe would be commercially viable and our goal is to reach field trial demonstrations within the next four years.

We believe that our switchgrass biomass biorefinery program offers the potential to improve the economics of producing not only *PHA Natural Plastic* but also fuels, such as ethanol. Polymer production economics can be improved because the manufacture of the material will take place within the plant. With our current process, only the feedstock (i.e. corn sugar) is produced within the plant and considerable costs are incurred converting that feedstock to the polymer. Through direct production in switchgrass, we can eliminate those conversion costs and potentially achieve production economics comparable to those of general agricultural products, which are inexpensive. It is also commonplace within both the agricultural and the energy industries to produce a variety of co-products from raw materials to maximize value. As with a barrel of oil that is converted to both gasoline and plastic, or a bushel of corn that is converted to sweetener and other products, we believe that a variety of switchgrass that is convertible to both fuel and *PHA Natural Plastic* can have more value than one that isn't.

While the cost of producing PHA Natural Plastics in switchgrass may be considerably lower than the cost of producing these materials by fermentation, we believe the introduction of plant based materials

can significantly expand the market for fermentation based materials. The scale and complexity of agriculturally producing PHA Natural Plastics will limit the grades of material produced to just a few. Conversely, fermentation based manufacturing allows many grades to be produced with a variety of property sets. Together, low cost plant based material can be blended with fermentation material to achieve an optimal balance between cost and performance.

In 2001, the U.S. Department of Energy awarded us a $7.5 million, 5-year grant to develop production of *PHA Natural Plastics* directly in crops that can be used to generate energy. In 2003, the U.S. Department of Agriculture awarded us an additional $2.0 million for this program. This concept, called a "Biomass Biorefinery", is based on the coproduction of energy and higher value *PHA Natural Plastics*. It is analogous to today's energy/petrochemical industry where synthetic plastics are derivative value-adding products to the production of energy from petroleum and natural gas.

Competition

The plastics market is large with many established players. The market has grown around the chemical processing of oil and natural gas, and is concentrated in the conventional, non-biodegradable petrochemical-based segment. Metabolix is focused on the biological processing of agricultural feedstocks and the production of biodegradable, renewable resource-based plastics, fuels and chemicals.

The current plastics market is primarily based on oil and natural gas. Established players in this segment include Dow Chemical, DuPont, BASF, Bayer, General Electric, Mitsubishi Chemical and Huntsman Chemical, among many others. The price of conventional petrochemical-based plastic is volatile, as it is dependent on petrochemicals as a key manufacturing input. In addition, the non-biodegradability of conventional petrochemical-based plastics makes them persistent in and harmful to the environment and creates significant waste.

A few companies, such as DuPont, have taken steps toward plastics based on renewable resources, and are commercializing plastics that use building blocks derived from renewable resources as components. These products remain primarily fossil carbon based and are not biodegradable. Other producers of petrochemical-based plastics, including BASF, Mitsubishi Chemical, and DuPont, now produce certain petrochemical grades that are biodegraded in industrial compost environments, but are otherwise persistent in the environment and are still subject to the volatility of oil and natural gas prices.

Our most comparable competitors are in the biodegradable, renewable resource based plastic segment, within which there are three distinct technologies: PHA, PLA and starch based biodegradables. Just as a wide variety of different petrochemical-based plastics now serve the needs of the market, we believe that these three technologies are more complementary than competitive. We believe that of these three technologies, *PHA Natural Plastics* offer the broadest range of properties and processing options, and will address the largest proportion of opportunities as an environmentally attractive yet functionally equivalent alternative to conventional petrochemical-based plastics. Unlike PLA and most starch-based biodegradables, *PHA Natural Plastics* can:

- decompose in the natural environment, including the marine environment,
- decompose in hot composts,
- remain functional in a wide range of temperature settings, and
- not deteriorate in everyday use.

Other companies active in the PHA plastics segment include Kaneka and minor producers in Brazil and China. The key players in PLA and starch based biodegradables are Cargill, Mitsui Chemical, Toyota, Novamont and Stanelco.

Biodegradability	Fossil Carbon Based Plastics	Biomass Renewable Resource Based Plastics
Biodegradable	Synthetic Biodegradable Polyesters: - -Dow Chemical - -DuPont - -BASF - -Mitsubishi Chemical - -Showa Denko	PHA: - -**Metabolix' *PHA Natural Plastics*** - -Kaneka's "PHBH" PLA: - -Cargill's NatureWorks™ - -Mitsui Chemical's Lacea™ - -Toyota Starch-based Biodegradables: - -Novamont's MaterBi™ - -Stanelco's Starpol™
Non-Biodegradable	-Traditional petrochemical-based products	DuPont — Sorona™ (~30% bio-based) Dow Chemical — Soybean Polyurethanes Arkema — Nylon 11

We believe our *PHA Natural Plastics* products compare well against other biodegradable plastics when judged on the following factors:

- *Biodegradability — PHA Natural Plastics* will biodegrade due to the action of microbial agents in a wide variety of circumstances, including both cold and hot compost (certain "biodegradable" plastics only degrade in hot compost), soil, anaerobic environments such as found in municipal waste treatment facilities and septic systems, and marine, wetland, and fresh water environments;
- *Property Range — PHA Natural Plastics* possess a particularly broad range of functional properties, varying from stiff to flexible to rubbery;
- *Processability — PHA Natural Plastics* can be processed in many types of existing polymer conversion equipment;
- *Upper Service Temperature* — Some formulations of *PHA Natural Plastics* will withstand temperatures in excess of 100^{o}C, i.e., the boiling point of water, an important threshold;
- *Resistance to Hydrolysis* — While *PHA Natural Plastics* will biodegrade in marine, wetland, and fresh water environments, they are resistant to reacting with even hot water over durations encountered in most applications

We believe that the principal advantages of our products will be the use of renewable feedstocks and biodegradability combined with their performance when compared to our competitor's products. We believe that we compare favorably with these competitors and have more stable feedstock input costs than conventional petrochemical-based plastics manufacturers.

Our ability to remain competitive will depend to a great extent upon our ongoing performance in the areas of product development and product performance. We cannot assure you that our products will achieve market acceptance or that we will be successful in the face of increasing competition from new products by existing competitors or new competitors entering the markets in which we intend to sell our products.

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Intellectual Property

Our continued success depends in large part on our proprietary technology. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality agreements, to establish and protect our proprietary rights.

We own over 320 issued patents and 100 patent applications world wide, and we have licensed from third parties approximately 60 issued patents and over 30 patent applications world wide. All but 5 of these issued patents, and their foreign counterparts, relate to the technology in our current business plan. These patents cover, among other things, the fundamental biotechnology needed to produce *PHA Natural Plastics* as well as compositions, processes and derived products. Of the licensed patents and patent applications, many are owned by Massachusetts Institute of Technology and exclusively licensed to us. Under the MIT licensing agreement, we currently pay annual license fees. During the fiscal year ended December 31, 2005, these fees totaled approximately $25,000. In addition, under this licensing agreement, we are obligated to pay royalties on future sales of products, if any, covered by the licensed patents.

Our patents are directed to compositions of polymers, genes, vectors, expression systems in plants and bacteria, devices, coatings, films, as well as methods of manufacture and use. The terms of such patents are set to expire at various times between 2009 and 2022.

We will continue to file and prosecute patent applications when and where appropriate to attempt to protect our rights in our proprietary technologies. It is possible that our current patents, or patents which we may later acquire, may be successfully challenged or invalidated in whole or in part. It is also possible that we may not obtain issued patents for our pending patent applications or other inventions we seek to protect. In that regard, we sometimes permit certain intellectual property to lapse or go abandoned under appropriate circumstances and due to uncertainties inherent in prosecuting patent applications, sometimes patent applications are rejected and we subsequently abandon them. It is also possible that we may develop proprietary products or technologies in the future that are not patentable or that the patents of others will limit or altogether preclude our ability to do business. In addition, any patent issued to us may not provide us with any competitive advantages, in which event we may abandon such patent.

Our registered U.S. trademarks include *Metabolix*, *Biopol*, and *Where Nature Performs*. Our marks *Metabolix* and *Where Nature Performs* and certain other trademarks have also been registered in selected foreign countries.

Our means of protecting our proprietary rights may not be adequate and our competitors may independently develop technology that is similar to ours. Legal protections afford only limited protection for our technology. The laws of many countries do not protect our proprietary rights to as great an extent as do the laws of the United States. Despite our efforts to protect our proprietary rights, unauthorized parties have in the past attempted, and may in the future attempt, to copy aspects of our products or to obtain and use information that we regard as proprietary. Third parties may also design around our proprietary rights, which may render our protected products less valuable, if the design around is favorably received in the marketplace. In addition, if any of our products or the technology underlying our products is covered by third-party patents or other intellectual property rights, we could be subject to various legal actions. We cannot assure you that our products do not infringe patents held by others or that they will not in the future.

Litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity, misappropriation, or other claims. Any such litigation, including The Procter & Gamble Company, or P&G, nullity action filed in Federal Patent Court in Munich, Germany described below in "*Legal Proceedings*", could result in substantial costs and diversion of our resources. Moreover, any settlement of or adverse judgment resulting from such litigation could require us to obtain a license to continue to use the technology that is the subject of the claim, or otherwise restrict or prohibit our use of the technology. Any required licenses may not be available to us on acceptable terms, if at all.

Employees

As of June 30, 2006, we had 42 full-time employees located in Cambridge, Massachusetts and one in Fort Mill, South Carolina, of whom 31 are in research and development, 3 are in marketing, 1 is in government programs and 8 are in operations/general and administration. None of our employees are subject to a collective bargaining agreement. We consider our relationships with our employees to be good.

Facilities

We currently lease approximately 28,000 square feet of office and research and development space at 21 Erie Street, Cambridge, Massachusetts. Our lease for this facility expires in 2014, with an option to renew for two additional five year periods. We do not own any real property. We believe that our leased facilities and additional and alternative space available to us will be adequate to meet our needs for the remainder of the year.

We have entered into an agreement with Nation Ford Chemical, or NFC, to act as a contract manufacturer and to operate a 10 ton per month recovery facility for pilot manufacturing in Fort Mill, South Carolina. We deliver raw materials to NFC for manufacturing and processing of *PHA Natural Plastics*, which is stored and then shipped at our instruction. The agreement terminates October 13, 2006, provided that the agreement will automatically be renewed for successive periods of 180 days, unless we or NFC give written notice of cancellation 30 days prior to the commencement of any such 180 day period. This plant is a model for the larger extraction assets to be employed at the Commercial Manufacturing Facility and the current processes, technology and systems will be replicated at a larger scale at the Commercial Manufacturing Facility.

Legal Proceedings

On March 8, 2005, P&G filed a nullity action in the Federal Patent Court in Munich, Germany, against the German equivalent of one of our patents covering the method of use of producing biopolymers. The patent at issue is licensed exclusively to us by MIT and will expire in July 2010. The nullity action alleges, among other things, extension of subject matter, insufficiency of disclosure, lack of novelty, and lack of inventive step. We are controlling the response to the nullity action with MIT's cooperation. We believe this nullity action is without merit and we intend to vigorously defend this action. However, the litigation process is inherently uncertain and there can be no assurance as to the ultimate outcome of this matter.

From time to time, we may be subject to other legal proceedings and claims arising in the ordinary course of business. We are not currently aware of any such proceedings or claims that we believe will have, individually or in the aggregate, a material adverse effect on our business, financial condition or results of operations.

Executive Officers and Directors

The following table sets forth information regarding our executive officers and directors, including their ages and positions as of June 30, 2006:

Name	Age	Position
James J. Barber, Ph.D.	53	President and Chief Executive Officer, Director
Oliver P. Peoples, Ph.D.	48	Chief Scientific Officer, Vice President, Research, Director
Johan van Walsem	43	Vice President, Manufacturing, Development and Operations
Thomas G. Auchincloss, Jr.	45	Chief Financial Officer, Vice President, Finance and Corporate Development
Robert Findlen	44	Vice President, Marketing
Edward M. Muller(1)	70	Chairman of the Board, Director
Edward M. Giles(2)	70	Director
Jay Kouba, Ph.D.(1)	54	Director
Jack W. Lasersohn(2)(3)	53	Director
Anthony J. Sinskey, Sc.D.(1)(2)	66	Director
Simon F. Williams, Ph.D.(3)	44	Director

(1) Member of the audit committee

(2) Member of the compensation committee

(3) Member of the nominating and corporate governance committee

James J. Barber, Ph.D. has served as our chief executive officer and as a director since joining Metabolix in January 2000. Prior to joining Metabolix, from September 1993 to January 2000, Dr. Barber was the global business director for the organometallics and catalysts business of Albemarle Corporation. From March 1992 to September 1993, Dr. Barber served as director, business development with Ethyl Corporation, a chemical manufacturing and supply company, where he was responsible for acquisitions and managed venture capital activities. Dr. Barber received a B.S. in Chemistry from Rensselaer Polytechnic Institute and a Ph.D. in Organic Chemistry from the Massachusetts Institute of Technology.

Oliver P. Peoples, Ph.D., a co-founder of Metabolix, has served as our chief scientific officer and vice president of research since January 2000, and was previously our director of research and vice president. Dr. Peoples has served as a director since June 1992. Prior to founding Metabolix, Dr. Peoples was a research scientist with the Department of Biology at the Massachusetts Institute of Technology where he emerged as a pioneer of the new field of metabolic pathway engineering and its applications in industrial biotechnology. The research carried out by Dr. Peoples at MIT established the fundamental tools and methods for engineering bacteria and plants to produce PHA Natural Plastics. Dr. Peoples has published numerous peer-reviewed academic papers and is an inventor of over 90 patents and patent applications worldwide. Dr. Peoples received a Ph.D. in Molecular Biology from the University of Aberdeen, Scotland.

Johan van Walsem has served as our vice president of manufacturing, development and operations since October 2003, and was previously our director of manufacturing and development from September 2001 to October 2003. Prior to joining Metabolix, from December 2000 to September 2001, Mr. van Walsem was senior biochemical engineer with Montec Research, a division

of Resodyn Corporation, where he was responsible for all fermentation technology development. Prior to that, Mr. von Walsem worked with AECI Bioproducts in South Africa in technology management and new product development, commercializing the first large scale biotechnology-based amino acid production in Africa. Mr. van Walsem received a master's degree in Chemical Engineering from the University of Pretoria (South Africa) and an M.B.A. from the University of South Africa.

Thomas G. Auchincloss, Jr. has served as our chief financial officer and vice president of finance and corporate development since May 2005. From April 2002 to May 2005, Mr. Auchincloss was a consultant to Metabolix, providing business development, financial and strategic consulting services. From 1994 to 2001, Mr. Auchincloss served in a variety of positions at Vertex Pharmaceuticals Incorporated, most recently as vice president, finance and treasurer. Prior to Vertex, Mr. Auchincloss served as an investment banker in the corporate finance department at Bear Stearns & Co. Inc. where he was responsible for executing a variety of transactions including public and private financings, mergers and acquisitions and financial advisory assignments. Mr. Auchincloss received a B.S. in Business Administration from Babson College and an M.B.A. in Finance from the Wharton School.

Robert Findlen has served as our vice president of marketing since June 2006. Prior to joining Metabolix, from March 2002 to June 2006, Mr. Findlen worked at GE Plastics, first from June 2003 to June 2006 as Product Market Director, LNP Plastics, and then from March 2002 to May 2003 as Vice President and Director, LNP Americas Commercial Business. LNP Engineering Plastics was acquired by GE Plastics in March 2002. Prior to the acquisition, Mr. Findlen held a number of positions at LNP Engineering Plastics, most recently, from 1998 to 2003, as Vice President of Sales and Marketing. Mr. Findlen received a B.S. in Plastics Engineering from University of Massachusetts at Lowell.

Edward M. Muller has served as the chairman of the board of directors since November 1993 and was previously our president and chief executive officer from October 1993 to January 2000. Mr. Muller held a number of positions, including chief executive officer, while at Halcon-SD Group between 1961 and 1985. That company developed a number of key processes for the production of raw materials for the polyester, nylon, polystyrene, and polyurethane industries. Mr. Muller serves on the board of directors of Tepha, Inc. Mr. Muller received a B.Ch.E. from The Cooper Union and a M.B.A. in Finance and Economics from New York University.

Edward M. Giles has served as a director since November 1993. Mr. Giles has served as the chairman of The Vertical Group, Inc., a venture capital company since January 1989. Mr. Giles was previously President of F. Eberstadt & Co., Inc., a securities firm. Mr. Giles serves on the board of directors as well as the Audit Committee of Ventana Medical Systems, Inc. Mr. Giles also serves on the board of directors of Tepha, Inc. Mr. Giles received a B.Ch.E. from Princeton University, and a S.M. in Industrial Management from the Massachusetts Institute of Technology.

Jay Kouba, Ph.D., has served as director since June 2006. Since January 2006, Dr. Kouba has served as the president of Ohio Consulting, a strategic management consulting firm. From January 1999 to December 2005, Dr. Kouba held several positions with BP's Petrochemicals Segment. From August 2004 to December 2005, Dr. Kouba served as Senior Vice President, Strategy, Marketing and Technology for Innovene BP's olefins and polymers subsidiary, and earlier in 2004, as Vice President, Sales, Marketing and Logistics. Between 1999 and 2003, Dr. Kouba was Vice President, Technology. Dr. Kouba received a B.S. in Chemistry from Stanford University, a Ph.D. in Chemistry from Harvard University and a M.B.A. from University of Chicago.

Jack W. Lasersohn has served as a director since December 1999. Since 1989, Mr. Lasersohn has served as a general partner of The Vertical Group, L.P., a private venture capital firm. Mr. Lasersohn

was a vice president and then director of the venture capital division of F. Eberstadt & Co., a securities firm, and Mr. Lasersohn serves as a director of Kyphon Inc., as well as several privately-held medical companies. Mr. Lasersohn received a B.S. in Physics from Tufts University, an M.A. from the Fletcher School of Law & Diplomacy at Tufts University and a J.D. from Yale University.

Anthony J. Sinskey, Sc.D., a co-founder of Metabolix, has served as a director since June 1992. From 1968 to present, Dr. Sinskey has been on the faculty of the Massachusetts Institute of Technology. Currently at M.I.T., he is Professor of Microbiology in the Department of Biology and Professor of Health Sciences and Technology in the Harvard-M.I.T. Health Sciences and Technology Program, as well as Co-Director of the Center for Biomedical Innovation. Dr. Sinskey serves on the board of directors of Tepha, Inc. Dr. Sinskey received a Sc.D. from Massachusetts Institute of Technology and a B.S. from the University of Illinois.

Simon F. Williams, Ph.D., a co-founder of Metabolix, has served as a director since June 1992. Dr. Williams is the president, chief executive officer and a director of Tepha, Inc. Between June 1992 and December 2002, Dr. Williams served in various roles within our company, including director of research, vice president, president, and treasurer. From October 1987 to May 1992, Dr. Williams was a lecturer in Organic Chemistry at Manchester University in England and a Visiting Scientist and NATO Postdoctoral Fellow at the Massachusetts Institute of Technology. Dr. Williams received a Ph.D. in Organic Chemistry from Cambridge University, England.

Board Composition

We currently have eight directors, of whom Edward M. Giles and Jack W. Lasersohn were elected as directors under the board composition provisions of a stockholders agreement and our certificate of incorporation. The board composition provisions of the stockholders agreement and our certificate of incorporation will be terminated upon the closing of this offering. Upon the termination of these provisions, there will be no further contractual obligations regarding the election of our directors. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal.

Following this offering, the board of directors will be divided into three classes with members of each class of directors serving for staggered three-year terms. The board of directors will consist of two Class I directors (currently Mr. Muller and Dr. Williams), three Class II directors (currently Mr. Lasersohn, Dr. Kouba and Dr. Peoples) and three Class III directors (currently Mr. Giles, Dr. Sinskey and Dr. Barber), whose initial terms will expire at the annual meetings of stockholders held in 2007, 2008 and 2009, respectively. Our classified board could have the effect of making it more difficult for a third party to acquire control of us.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which operates pursuant to a separate charter adopted by our board of directors. The composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act of 2002, the NASDAQ Stock Market and the Securities and Exchange Commission rules and regulations.

Audit Committee. Edward M. Muller, Anthony J. Sinskey, Sc.D., and Jay Kouba, Ph.D., currently serve on the audit committee. Mr. Muller is the chairman of our audit committee. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting related complaints and concerns; and
- preparing the audit committee report required by Securities and Exchange Commission rules to be included in our annual proxy statement.

Compensation Committee. Anthony J. Sinskey, Sc.D., Edward M. Giles and Jack W. Lasersohn currently serve on the compensation committee. Dr. Sinskey is the chairman of our compensation committee. The compensation committee's responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to compensation of our chief executive officer;
- evaluating the performance of our chief executive officer in light of such corporate goals and objectives and determining the compensation of our chief executive officer;
- reviewing and approving the compensation of our other executive officers;
- overseeing and administering our compensation, welfare, benefit and pension plans and similar plans; and
- reviewing and making recommendations to the board with respect to director compensation.

Nominating and Corporate Governance Committee. Jack W. Lasersohn and Simon F. Williams, currently serve on the nominating and corporate governance committee. Mr. Lasersohn is the chairman of our nominating and corporate governance committee. The nominating and corporate governance committee's responsibilities include:

- developing and recommending to the board criteria for board and committee membership;
- establishing procedures for identifying and evaluating director candidates including nominees recommended by stockholders;
- identifying individuals qualified to become board members;
- recommending to the board the persons to be nominated for election as directors and to each of the board's committees;

- developing and recommending to the board a code of business conduct and ethics and a set of corporate governance guidelines;
- serving as the Qualified Legal Compliance Committee in accordance with Section 307 of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated thereunder; and
- overseeing the evaluation of the board and management.

Compensation of Directors

Upon completion of the proposed initial public offering, each non-employee member of our board of directors will be entitled to receive an annual retainer of $30,000. In addition, each non-employee director serving as a member but not chair of our audit committee, compensation committee and nominating and corporate governance committee will be entitled to an annual retainer of $5,000, and the chairs of the audit committee, compensation committee and nominating and corporate governance committee will be entitled to an additional annual retainer of $15,000, $10,000 and $10,000, respectively.

In June 2006, we granted Dr. Kouba an option to purchase 20,000 shares of our common stock as compensation for his service on our board of directors. This option has an exercise price of $4.20 per share and is fully vested and exercisable immediately. We have not otherwise paid separate compensation for services rendered as a director.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or compensation committee.

Executive Officers

Each of our executive officers has been elected by our board of directors and serves until his or her successor is duly elected and qualified or until his or her earlier resignation or removal.

Executive Compensation

Compensation Earned

The following summarizes the compensation earned during the year ended December 31, 2005, by our chief executive officer and our three other most highly compensated executive officers who were serving as executive officers on December 31, 2005. We refer to these individuals as our "named executive officers." The compensation in this table does not include certain perquisites and other personal benefits received by the named executive officers that did not exceed the lesser of $50,000 or 10% of any officer's total compensation reported in this table.

Summary Compensation Table

Name and Principal Position	Annual Compensation		Long-Term Compensation	
	Salary	Bonus	Securities Underlying Options (#)	All Other Compensation($)
James J. Barber President and Chief Executive Officer	$ 235,000	—	397,235	$ 106,739[1]
Oliver P. Peoples Vice President, Research	$ 182,400	—	144,000	—
Johan van Walsem Vice President, Manufacturing, Development and Operations	$ 172,267	$ 10,000	220,000	—
Thomas G. Auchincloss, Jr. Chief Financial Officer	$ 155,600[2]	—	220,000	—

(1) Represents $75,000 of loan principal and $31,739 of interest on that loan forgiven by the Company during 2005.

(2) Represents Mr. Auchincloss's salary during the year ended 2005 from commencement of his employment with us on May 1, 2005, plus $40,000 in fees for consulting services rendered to us from January 1, 2005 to May 1, 2005.

Option Grants in Last Fiscal Year

The following table presents all grants of stock options during the year ended December 31, 2005 to each of the named executive officers. We have not granted any stock appreciation rights. The option grants listed below were made under our 1995 Stock Plan or 2005 Stock Plan at exercise prices equal to the fair market value of our common stock on the date of grant, as determined by our board of directors. The potential realizable value, if applicable, is calculated based on the term of the option at its time of grant, which is ten years. This value is net of exercise prices and before taxes, and is based on an assumed initial public offering price of $ per share, the mid-point of the initial public offering price range, and the assumption that our common stock appreciates at the annual rate shown, compounded annually, from the date of grant until its expiration date. These numbers are calculated based on the Securities and Exchange Commission requirements and do not reflect our projection or estimate of future stock price growth. Actual gains, if any, on stock option exercises will depend on the future performance of the common stock and the date on which the options are exercised.

The percentage of total options granted to employees in 2005 shown in the table below is based on options to purchase an aggregate of 1,497,735 shares of common stock granted to employees in 2005.

In general, options granted to new employees in 2005 vest in quarterly installments over four years.

Name	Individual Grants				Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term	
	Number of Securities Underlying Options Granted (#)	Percent of Total Options Granted to Employees in Fiscal Year (%)	Exercise or Base Price ($/Share)	Expiration Date	5% ($)	10% ($)
James J. Barber	243,235	16.2	1.50	12/14/15		
	154,000[(1)]	10.3	1.50	12/14/15		
Oliver P. Peoples	144,000	9.6	1.35	9/20/15		
Johan van Walsem	220,000	14.7	1.35	9/20/15		
Thomas G. Auchincloss, Jr.	220,000	14.7	1.35	9/20/15		

(1) These options vest, in part, upon the attainment of specified performance and corporate financing milestones.

Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values

The following table sets forth certain information concerning the number and value of options exercised by the named executive officers during 2005, if any, and the number and value of any exercised and unexercised options held by the named executive officers at December 31, 2005. There was no public market for our common stock as of December 31, 2005. Accordingly, the value of unexercised in-the-money options, if applicable, represents the total gain that would be realized if all in-the-money options held at December 31, 2005 were exercised, determined by multiplying the number of shares underlying the options by the difference between an assumed initial public offering price of $ per share, the mid-point of the initial public offering price range, and the per share option exercise price.

Name	Shares Acquired on Exercise (#)	Value Realized($)	Number of Securities Underlying Unexercised Options at December 31, 2005		Value of Unexercised In-the-Money Options at December 31, 2005	
			Exercisable	Unexercisable	Exercisable	Unexercisable
James J. Barber	—	—	370,484	303,426		
Oliver P. Peoples	—	—	212,000	138,000		
Johan van Walsem	—	—	96,250	183,750		
Thomas G. Auchincloss, Jr.	—	—	98,750	181,250		

Employee Benefit Plans

1995 Stock Plan

Our 1995 Stock Plan was adopted by our board of directors and approved by our stockholders in June 1995 and amended in February 1998, September 1998, November 1998, November 1999, March 2000 and March 2003. Our 1995 Stock Plan is administered by the compensation committee of our board of directors. The compensation committee has the full authority and discretion to interpret the 1995 Stock Plan and to apply its provisions. Our 1995 Stock Plan permitted us to make grants of incentive and non-qualified stock options. The 1995 Stock Plan also permitted us to award both shares of our common stock and opportunities to make direct purchases of our common stock.

Stock options granted under our 1995 Stock Plan have a maximum term of ten years from the date of grant and incentive stock options have an exercise price of no less than the fair market value of our common stock on the date of grant. Awards granted under our 1995 Stock Plan are not transferable other than by will or the laws of descent and distribution. In the event of a change-in-control of the Company, our board of directors and the board of directors of the surviving or acquiring entity shall, as to outstanding awards under the 1995 Stock Plan, make appropriate provision for the continuation, assumption or other disposition of such awards.

Our 1995 Stock Plan was terminated in June 2005 and no further grants or awards have since been, or will be, made thereunder. Grants and awards that are outstanding under our 1995 Stock Plan continue to be governed by the terms of our 1995 Stock Plan and the agreements related to such grants and awards. As of June 30, 2006, there were outstanding options under our 1995 Stock Plan to purchase a total of 913,675 shares of our common stock.

2005 Stock Plan

Our 2005 Stock Plan was adopted by our board of directors and approved by our stockholders in June 2005. Our 2005 Stock Plan permits us to make grants of incentive stock options, non-qualified stock options, stock grants and other stock-based awards. We have initially reserved 2,250,000 shares of our common stock for the issuance of awards under the 2005 Stock Plan. This number is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization. Generally, shares that are forfeited or canceled from awards under the 2005 Stock Plan also will be available for future awards. In addition, awards returned to our 1995 Stock Plan as a result of their expiration, cancellation or termination are automatically made available for issuance under our 2005 Stock Plan. We do not intend to grant additional options under this plan after this offering and the aggregate number of shares to be issued under 2005 Stock Plan will be reduced to , which represents the total number of shares issuable upon exercise of outstanding options granted under the 2005 Stock Plan.

The 2005 Stock Plan is administered by our compensation committee. The compensation committee has full power and authority to select the participants to whom awards will be granted, to make any combination of awards to participants, to accelerate the exercisability or vesting of any award and to determine the specific terms and conditions of each award, subject to the provisions of our 2005 Stock Plan. All of our employees, directors and consultants are eligible to participate in the 2005 Stock Plan.

The exercise price of stock options awarded under our 2005 Stock Plan may not be less than the fair market value of our common stock on the date of the option grant and the term of each option granted under our 2005 Stock Plan may not exceed ten years from the date of grant. The compensation committee will determine at what time or times each option may be exercised (provided that in no event may it exceed ten years from the date of grant) and, subject to the provisions of our 2005 Stock Plan, the period of time, if any, after retirement, death, disability or other termination of employment during which options may be exercised.

Stock grants may also be awarded under our 2005 Stock Plan. Stock grants are awards of shares of our common stock that may be subject to restrictions or repurchase rights established by the compensation committee. The compensation committee may impose whatever conditions to vesting it determines to be appropriate in connection with such stock grants.

Other stock-based awards may also be granted under our 2005 Stock Plan. Other stock-based awards are awards based on our common stock having terms and conditions as the compensation committee may determine and could include the grant of shares based upon certain conditions, the grant of securities convertible into shares of our common stock, and the grant of stock appreciation rights, phantom stock awards or stock units.

Unless the compensation committee provides otherwise, our 2005 Stock Plan does not generally allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime. In the event of a change-in-control of the Company, our board of directors and the board of directors of the surviving or acquiring entity shall, as to outstanding awards under the 2005 Stock Plan, make appropriate provision for the continuation, assumption or other disposition of such awards.

No awards may be granted under our 2005 Stock Plan after June 1, 2015 and we do not intend to grant any awards under our 2005 Stock Plan after this offering. In addition, our board of directors may amend or discontinue our 2005 Stock Plan at any time and the compensation committee may amend or cancel any outstanding award for the purpose of satisfying changes in law or for any other lawful purpose. Our stockholders may also vote to terminate the 2005 Stock Plan. No amendment may adversely affect the rights under any outstanding award without the holder's consent.

As of June 30, 2006, there were 1,882,402 outstanding options to purchase shares of our common stock under our 2005 Stock Plan and, assuming that no shares are returned to our 1995 Stock Plan and made available for issuance under our 2005 Stock Plan, 683,765 shares of our common stock are available for future issuance or grant under our 2005 Stock Plan.

2006 Stock Plan

Our 2006 Stock Option and Incentive Plan, or 2006 Option Plan, was adopted by our board of directors and approved by our stockholders in 2006. The 2006 Option Plan permits us to make grants of incentive stock options, non-qualified stock options, stock appreciation rights, deferred stock awards, restricted stock awards, unrestricted stock awards, cash-based awards and dividend equivalent rights. We have initially reserved shares of our common stock for the issuance of awards under the 2006 Option Plan. The 2006 Option Plan provides that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning in 2007, by % of the outstanding number of shares of common stock on the immediately preceding December 31; provided that the maximum aggregate number of shares reserved may not exceed % of the total number of outstanding shares of stock. This number is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization. Generally, shares that are forfeited or canceled from awards, held back upon exercise of an award, or otherwise reacquired by the Company under the 2006 Option Plan also will be available for future awards. No awards have been granted under the 2006 Option Plan to date.

The 2006 Option Plan is administered by our compensation committee. The compensation committee has full power and authority to select the participants to whom awards will be granted, to make any combination of awards to participants, to accelerate the exercisability or vesting of any award and to determine the specific terms and conditions of each award, subject to the provisions of the 2006 Option Plan. All full-time and part-time officers, employees, directors and other key persons (including consultants and prospective employees) are eligible to participate in the 2006 Option Plan.

The exercise price of stock options awarded under the 2006 Option Plan may not be less than the fair market value of the common stock on the date of the option grant. The compensation committee will

determine at what time or times each option may be exercised (provided that in no event may it exceed ten years from the date of grant) and, subject to the provisions of the 2006 Option Plan, the period of time, if any, after retirement, death, disability or other termination of employment during which options may be exercised.

Stock appreciation rights may be granted under our 2006 Option Plan. Stock appreciation rights allow the recipient to receive the number of shares equal to the appreciation in the fair market value of our common stock between the exercise date and the date of grant. The compensation committee determines the terms of stock appreciation rights, including when such rights become exercisable.

Restricted stock, unrestricted stock, cash-based awards, deferred stock awards and dividend equivalent rights may also be granted under our 2006 Option Plan. Restricted stock awards are shares of our common stock that vest in accordance with terms and conditions established by the compensation committee. The compensation committee may impose whatever conditions to vesting it determines to be appropriate. Shares of restricted stock that do not vest are automatically subject to our right of repurchase or forfeiture. Unrestricted stock awards are awards of shares of stock that are free of any restrictions. The compensation committee may grant unrestricted stock awards in respect of past services or in lieu of other compensation. Cash-based awards are awards that entitle the recipient to receive a cash-denominated payment. The compensation committee shall establish the terms and conditions of cash-based awards, including the conditions upon which any such award will become vested or payable. Cash-based awards may be made in cash or shares of stock in the compensation committee's discretion. Deferred stock awards are units entitling the recipient to receive shares of stock paid out on a deferred basis, and subject to such restrictions and conditions, as the compensation committee shall determine. Dividend equivalent rights are the right to receive credits based on cash dividends that would have been paid on the shares of stock underlying the award and are subject to the terms and conditions specified by the compensation committee at the time of grant. The 2006 Option Plan also permits the compensation committee to grant awards that are intended to qualify as "performance-based compensation" under Section 162(m) of the Code. These awards are only payable upon the attainment of specified performance goals, as described in the 2006 Option Plan. The maximum performance-based award payable in any performance cycle to any one individual is or in the event of a performance-based award that is a cash-based award.

Unless the compensation committee provides otherwise, our 2006 Option Plan does not generally allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime. In the event of a change-in-control of Metabolix, our board of directors and the board of directors of the surviving or acquiring entity shall, as to outstanding awards under the 2006 Option Plan, make appropriate provision for the continuation or assumption of such awards.

No awards may be granted under the 2006 Option Plan after . In addition, our board of directors may amend or discontinue the 2006 Option Plan at any time and the compensation committee may amend or cancel any outstanding award for the purpose of satisfying changes in law or for any other lawful purpose. No such amendment may adversely affect the rights under any outstanding award without the holder's consent. Other than in the event of a necessary adjustment in connection with a change in our stock or a merger or similar transaction, the compensation committee may not "reprice" or otherwise reduce the exercise price of outstanding stock options.

As of June 30, 2006, there were no outstanding options to purchase shares of our common stock under our 2006 Option Plan and, assuming that no shares are returned to our 1995 Stock Plan and 2005 Option Plan and made available for issuance under our 2006 Option Plan, shares of our common stock are available for future issuance or grant under our 2006 Option Plan.

401(k) Plan

We maintain a tax-qualified retirement plan that provides all regular employees with an opportunity to save for retirement on a tax-advantaged basis. Under our 401(k) Plan, participants may elect to defer a portion of their compensation on a pre-tax basis and have it contributed to the plan subject to applicable annual Internal Revenue Code limits. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participant's directions. Employee elective deferrals are 100% vested at all times. Our 401(k) Plan allows for discretionary matching contributions to be made by us. As a tax-qualified retirement plan, contributions to our 401(k) Plan and earnings on those contributions are not taxable to the employees until distributed from our 401(k) Plan and all contributions are deductible by us when made.

Employment, Severance and Non-Competition Arrangements

We have employment agreements with Dr. Barber, Mr. van Walsem, Mr. Auchincloss and Mr. Findlen.

Dr. Barber, our president and chief executive officer, entered into an employment agreement with us on December 14, 2005. The agreement entitles Dr. Barber to an annual base salary of $19,583 per month, subject to adjustment at our discretion. Pursuant to the agreement, Dr. Barber is eligible to receive a discretionary bonus. In addition, we agreed to forgive a $75,000 loan made to Dr. Barber in 2000 in exchange for Dr. Barber's covenants under the agreement. Pursuant to the terms of the agreement, if we terminate Dr. Barber's employment without "cause" (as defined in the agreement), he will be entitled to continuing pay for a period of twelve months, at the rate equal to his base salary and the cost of COBRA premiums for twelve months. In addition, if the award of a bonus has become customary, Dr. Barber will be entitled to a payment equal to the average of the bonuses paid to him, if any, in the two years preceding the termination. If we terminate Dr. Barber's employment without cause or if Dr. Barber terminates his employment for "good reason" (as defined in the agreement) within the twenty-four month period immediately following, or the two month period immediately prior to, a "change of control" (as defined in the agreement), in addition to any accrued obligations, and subject to certain conditions: (i) we will continue Dr. Barber's base salary and payment of COBRA premiums for the period of twelve months following the termination, (ii) if the award of a bonus has become customary, Dr. Barber will be entitled to a payment equal to the average of the bonuses paid to him in the two years preceding the termination, and (iii) certain of Dr. Barber's stock options will be accelerated. To the extent the executive would be subject to tax under 4999 of the Code as a result of certain payment in connection with a "transaction" (as defined in the agreement), the number of stock options that would otherwise become exercisable will be reduced or delayed to the extent necessary to maximize the executive's total after-tax payments. Under the agreement, Dr. Barber was granted incentive stock options under our 2005 Stock Plan, with an exercise price of $1.50 per share, as follows: (i) an option to purchase 243,235 shares of our common stock, 18% of which vested as of the date of grant, the remainder to vest over a 4 year period, subject to the terms of the agreement; (ii) options to purchase 102,666 shares of our common stock, the vesting of such options to be contingent upon the occurrence of certain financing milestones; and (iii) an option to purchase 51,334 shares of our common stock, the vesting of such option to be contingent upon the advancement of our strategic alliance with ADM and certain financing milestones.

Mr. van Walsem, our vice president, manufacturing, development and operations, has entered into an employment agreement with us dated May 1, 2006 that provides for a base salary of $14,733 per month, subject to adjustment from time to time. Mr. Auchincloss, our chief financial officer, has entered into an employment agreement with us dated January 10, 2006 that provides for a base salary of $14,733 per month, subject to adjustment from time to time. Mr. Findlen, our Vice President, Marketing, has entered into an employment agreement with us dated May 24, 2006 that provides for

a base salary of $16,666 per month, subject to adjustment from time to time. Pursuant to these agreements, each executive is eligible to receive a discretionary bonus. Additionally, Mr. Findlen's employment agreement provides for a signing bonus of $60,000, payable in two installments. If we terminate the executive's employment without "cause" (as defined in the agreement), in addition to any accrued obligations, and contingent on the executive's provision of a timely and complete release of claims against us, for the period of twelve months following the termination he will be entitled to continuation of his base salary and payment of COBRA premiums. In addition, if the award of a bonus has become customary, the executive will be entitled to a payment equal to the average of the bonuses paid to him in the two years preceding the termination. If we terminate the executive's employment without cause or if the executive terminates his employment for "good reason" (as defined in the agreement) within the twenty-four month period immediately following, or the two month period immediately prior to, a "change of control" (as defined in the agreement), in addition to any accrued obligations and subject to certain conditions: (i) for a period of twelve months following the termination, we will continue the executive's base salary and payment of COBRA premiums, (ii) if the award of a bonus has become customary, the executive will be entitled to a payment equal to the average of the bonuses paid to him in the two years preceding the termination, and (iii) all of the executive's stock options will be accelerated, subject to certain conditions. To the extent the executive would be subject to tax under Section 4999 of the Code as a result of certain payment in connection with a "transaction" (as defined in the agreement), the number of stock options that would otherwise become exercisable will be reduced or delayed to the extent necessary to maximize the executive's total after-tax payments.

Each of our executive officers has signed an employee noncompetition, nondisclosure and inventions agreement. These agreements include a provision prohibiting the executive, during his employment by us and for a period of two years thereafter, from engaging in certain business activities. Dr. Barber and Mr. van Walsem are restricted from business activities in the field of methods of production, application and use of PHAs, their derivatives and other related technology developed by us. Mr. Auchincloss, Dr. Peoples and Mr. Findlen are restricted from business activities which are directly or indirectly in competition with the products or services being developed, manufactured, marketed, distributed, planned, sold or otherwise provided by us or which are in any way directly or indirectly detrimental to our business.

Limitation of Liability and Indemnification

As permitted by the Delaware General Corporation Law, we have adopted provisions in our certificate of incorporation and by-laws to be in effect at the closing of this offering that limit or eliminate the personal liability of our directors. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock repurchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our by-laws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the Delaware General Corporation Law; and

- we will advance expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings, subject to limited exceptions.

Contemporaneous with the completion of this offering, we intend to enter into indemnification agreements with each of our executive officers and directors. These agreements provide that we will indemnify each of our directors to the fullest extent permitted by law and advance expenses to each indemnitee in connection with any proceeding in which indemnification is available.

We intend to obtain, contemporaneously with the offering, director and officer liability insurance that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, or persons controlling the registrant pursuant to the foregoing provisions, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

These provisions may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. We believe that these provisions, the indemnification agreements and the insurance are necessary to attract and retain talented and experienced directors and officers.

At present, there is no pending litigation or proceeding involving any of our directors or officers where indemnification will be required or permitted. We are not aware of any threatened litigation or proceeding that might result in a claim for such indemnification.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation agreements and other arrangements which are described as required in "Management" and the transactions described below, since January 1, 2002, there has not been, and there is not currently proposed, any transaction or series of similar transactions to which we were or will be a party in which the amount involved exceeded or will exceed $60,000 and in which any director, executive officer, holder of five percent or more of any class of our capital stock or any member of their immediate family had or will have a direct or indirect material interest.

All of the transactions set forth below were approved by a majority of the board of directors, including a majority of the independent and disinterested members of the board of directors. We believe that we have executed all of the transactions set forth below on terms no less favorable to us than we could have obtained from unaffiliated third parties. It is our intention to ensure that all future transactions between us and our officers, directors and principal stockholders and their affiliates, are approved by a majority of the board of directors, including a majority of the independent and disinterested members of the board of directors, and are on terms no less favorable to us than those that we could obtain from unaffiliated third parties.

Private Placements of Securities

In April 2002 and May 2002, we issued and sold 637,461 shares of Series I convertible preferred stock at price of $10.80 per share. In connection with the issuance of Series I preferred stock during 2002, we issued warrants to purchase 637,461 shares of common stock at an exercise price of $10.80 per share. Also in April 2002 and May 2002, we exchanged 529,780 shares of Series H convertible preferred stock for 529,780 shares of Series I convertible preferred stock. Concurrently, we issued warrants to purchase 529,780 shares of common stock at an exercise price of $10.80 per share in connection with the exchange.

In June 2003, we issued 270,704 shares of Series I preferred stock at $10.80 per share. In conjunction with the issuance of the Series I preferred stock during 2003, we issued warrants to purchase 270,704 shares of common stock at an exercise price of $10.80 per share.

In November 2003, we issued 324,074 shares of Series J convertible preferred stock at $10.80 per share. In conjunction with the issuance of Series J preferred stock, shareholders of 1,208,880 shares of Series I preferred stock exercised their right to exchange the shares of Series I preferred stock for 1,208,880 shares of Series J preferred stock. Shareholders of 192,147 shares of Series I preferred stock who elected not to participate in the Series J preferred stock offering had their 192,147 shares of Series I preferred stock converted into 192,147 shares of Series I-1 convertible preferred stock. In connection with the issuance of Series J preferred stock, we issued warrants to purchase 324,074 shares of common stock at an exercise price of $0.10 per share. Concurrently, we issued warrants to purchase 1,208,880 shares of common stock at an exercise price of $0.10 per share in connection with the exchange of Series I preferred stock for Series J preferred stock. In addition, we cancelled warrants to purchase 426,259 shares of common stock at an exercise price of $10.80 per share. In January 2004, we issued an additional 57,370 shares of Series J preferred stock at $10.80 per share. In conjunction with the issuance of Series J preferred stock in 2004, the remaining shareholders of 36,918 shares of Series I preferred stock exercised their right to exchange the shares of Series I preferred stock for 36,918 shares of Series J preferred stock. In connection with the issuance of the Series J preferred stock during 2004, we issued warrants to purchase 57,370 shares of common stock at an exercise price of $0.10 per share. Concurrently, we issued warrants to purchase 36,918 shares of common stock at an exercise price of $0.10 per share in connection with the exchange of Series I preferred stock for Series J preferred stock.

In April through August 2004, we issued 1,100,766 shares of Series 04 convertible preferred stock at $5.40 per share. In conjunction with the issuance of Series 04 preferred stock, shareholders of 1,625,242 shares of Series J preferred stock exercised their right to exchange the shares of Series J preferred stock for 3,250,484 shares of Series 04 preferred stock. A holder of 2,000 shares of Series J preferred stock who elected not to participate in the Series 04 preferred stock offering had his 2,000 shares of Series J preferred stock converted into 2,000 shares of Series J-1 convertible preferred stock. In conjunction with the issuance of Series 04 preferred stock in 2004 and the exchange of the shares of Series J preferred stock, 189,716 warrants to purchase common stock were cancelled.

From March through May 2005, we issued 893,652 shares of Series 04 convertible preferred stock at $5.40 per share.

In January 2006, we issued 2,920,000 shares of Series 05 convertible preferred stock at $6.00 per share.

The following table summarizes, on a common stock equivalent basis, the participation by our five percent stockholders, officers and directors.

Purchaser[1]	Total Common Stock Equivalents	Aggregate Consideration Paid	Investment Participation
State Farm Automobile Insurance Co.	770,183	$ 5,970,207	Series I, J, 04 and 05
The Vertical Group, L.P.[2]	477,340	$ 3,775,269	Series I, J, 04 and 05
Archer Daniels Midland Company	833,333	$ 4,999,998	Series 05
Thomas G. Auchincloss, Jr.	13,009	$ 90,460	Series I, J, 04 and 05
Edward M. Muller	47,311	$ 510,959	Series I
Edward M. Giles[3]	265,991	$ 2,100,257	Series I, J, 04 and 05
Jack W. Lasersohn[2]	477,340	$ 3,775,269	Series I, J, 04 and 05
Anthony J. Sinskey	48,292	$ 336,559	Series I, J, 04 and 05

(1) See "Principal Stockholders" for more detail on shares held by these purchasers.

(2) Represents the combined holdings of Vertical Fund I, L.P. and Vertical Fund II, L.P., the sole general partner of each of which is The Vertical Group, L.P. Mr. Lasersohn, who is one of our directors, is a general partner of Vertical Group, L.P. Mr. Lasersohn shares voting and investment power over shares held by Vertical Fund I. L.P. and Vertical Fund II, L.P.

(3) Mr. Giles, who is one of our directors, is limited partner of The Vertical Group, L.P., the sole general partner of each of Vertical Fund I, L.P. and Vertical Fund II, L.P. Mr. Giles is the Chairman of the Board of The Vertical Group, Inc. Mr. Giles does not, directly or indirectly, have any voting or dispositive power over shares held by Vertical Fund I, L.P. or Vertical Fund II, L.P.

Transactions with Archer Daniels Midland Company

ADM has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the initial public offering price. The sale of such shares to ADM will not be registered in this offering. ADM will have piggyback registration rights and one demand registration right with respect to such shares upon the expiration of the lock-up agreement.

On July 12, 2006, we and ADM Polymer, a wholly-owned subsidiary of ADM, entered into the Commercial Alliance Agreement and related agreements. We were also a party to a Technology

Alliance and Option Agreement with ADM as part of our strategic alliance which terminated upon execution of the Commercial Alliance Agreement.

Transactions with our Executive Officers and Directors

We have employment agreements with Dr. Barber, Mr. van Walsem, Mr. Auchincloss and Mr. Findlen, which provide for certain salary, bonus, stock option and severance compensation. For more information regarding these agreements, see "Management — Employment, Severance and Non-Competition Agreements."

Prior to completion of this offering, we intend to enter into indemnification agreements with each of our executive officers and directors, providing for indemnification against expenses and liabilities reasonably incurred in connection with their service for us on our behalf. For more information regarding these agreements, see "Management — Limitation of Liability and Indemnification."

In September 2005, we retained Dr. ChoKyun Rha, the spouse of our director, Dr. Sinskey, to serve as an advisor for the purpose of building and managing business relationships in Asia. In consideration for Dr. Rha's services, on September 20, 2005, we granted Dr. Rha a nonqualified stock option to purchase 20,000 shares of our common stock, with an exercise price of $1.35 per share, vesting over a period of four years.

In 1999, we entered into a sublicense agreement with Tepha, Inc. ("Tepha"), to sublicense certain technology to Tepha. Our director, Dr. Williams, is the president and chief executive officer and a director of Tepha. In addition, our directors Messrs. Muller and Giles and Dr. Sinskey serve on the board of directors of Tepha. The agreement with Tepha contains provisions for sublicense maintenance fees to be paid to us upon Tepha achieving certain financing milestones and for product related milestone payments. Under the agreement, we will also receive royalties on net sales of licensed products or sublicensing revenues received by Tepha, subject to a minimum payment each year.

In December 2002, we amended this agreement to provide that $800,000 of Tepha's payment obligation pursuant to the agreement became payable in both cash and equity. In October 2002, Tepha paid us $100,000 in cash, and the balance of the payment obligation was satisfied through the issuance of 648,149 shares of Tepha's Series A redeemable convertible preferred stock. We licensed or sublicensed additional technology to Tepha in 2003, 2004 and 2005. We recognized license and royalty revenues of $112,800, $316,880, $242,100 and $189,800 from Tepha for the years ended December 31, 2003, 2004, 2005 and for the six months ended June 30, 2006 respectively. We believe that the terms of the agreements with Tepha are no less favorable to us than license agreements that might be entered into with an independent third party.

In June 2000, in connection with his relocation to Massachusetts, we made a $75,000 loan to James J. Barber, our chief executive officer. The loan was evidenced by a promissory note bearing interest at the rate of 6.62% per annum. In December 2005 the loan principal of $75,000 and the outstanding interest balance of $106,739 were forgiven in full.

Stock Option Awards

For information regarding stock options and stock awards granted to our named executive officers and directors, see "Management — Compensation of Director" and "Management — Executive Compensation."

PRINCIPAL STOCKHOLDERS

The following table sets forth the beneficial ownership information of our common stock at June 30, 2006, and as adjusted to reflect the sale of the shares of common stock in this offering and the sale of the ADM Shares, for:

- each person known to us to be the beneficial owner of more than 5% of our common stock and another significant stockholder;
- each named executive officer;
- each of our directors; and
- all of our executive officers and directors as a group.

Unless otherwise noted below, the address of the persons and entities listed on the table is c/o Metabolix, Inc., 21 Erie Street, Cambridge, MA 02139. We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock reflected as beneficially owned, subject to applicable community property laws. We have based our calculation of the percentage of beneficial ownership on 14,749,713 shares of common stock outstanding on June 30, 2006, assuming the conversion of all of the outstanding convertible preferred stock, and shares of common stock outstanding upon completion of this offering and the sale of the ADM Shares.

In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares of common stock subject to options or warrants held by that person that are currently exercisable or exercisable within 60 days of June 30, 2006. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Beneficial ownership representing less than 1% is denoted with an asterisk (*).

Beneficial Owner	Shares Beneficially Owned Prior to this offering		Shares Beneficially Owned After this offering	
	Number	Percent	Number	Percent
5% Stockholders:				
The Vertical Group, L.P.[1] 25 DeForest Ave Summit, NJ 07901	2,080,015	13.94%	2,080,015	
State Farm Mutual[2] Automobile Insurance Co. One State Farm Plaza Bloomington, IL 61701	2,882,199	18.64%	2,882,199	
Archer Daniels Midland Company[3] 4666 Faries Parkway Decatur, IL 62526	833,333	5.65%		
Westfield Capital One Financial Center Boston, MA 02111	666,667	4.52%	666,667	
Directors and Named Executive Officers:				
James J. Barber[4]	446,989	2.94%	446,989	
Oliver P. Peoples[5]	741,500	4.95%	741,500	
Johan van Walsem[6]	137,500	*	137,500	
Thomas G. Auchincloss, Jr.[7]	162,501	1.09%	162,501	
Robert Findlen	—	*	—	
Edward M. Muller[8]	1,537,507	10.30%	1,537,507	
Edward M. Giles[1][9]	1,281,231	8.54%	1,281,231	
Jay Kouba[10]	20,000	*	20,000	
Jack W. Lasersohn[1]	2,080,015	13.94%	2,080,015	
Anthony J. Sinskey[11]	601,002	4.07%	601,002	
Simon F. Williams[12]	500,000	3.39%	500,000	
All directors and executive officers as a group (11 persons)	7,508,246	45.92%	7,508,245	

* less than 1%.

(1) Consists of 1,093,096 shares held by The Vertical Fund I, L.P. and 116,760 shares issuable to Vertical Fund I, L.P. upon exercise of warrants. Also consists of 815,548 shares held by Vertical Fund II, L.P. and 54,611 shares issuable to Vertical Fund II, L.P. upon exercise of warrants. Mr. Lasersohn is a General Partner of The Vertical Group, L.P., the sole general partner of each of Vertical Fund I, L.P. and Vertical Fund II, L.P., and may be deemed to share voting and investment power with respect to all shares held by those entities. Mr. Lasersohn disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any. Mr. Giles is a limited partner of The Vertical Group, L.P., the sole general partner of each of Vertical Fund I, L.P. and Vertical Fund II, L.P., and the Chairman of the Board of The Vertical Group, Inc. Mr. Giles does not have any direct or indirect voting and investment power with respect to the shares held by Vertical Fund I, L.P. and Vertical Fund II, L.P. Mr. Giles disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(2) Includes 716,795 shares issuable to State Farm Mutual Automobile Insurance Co. upon exercise of warrants.

footnotes continued on following page

(3) ADM has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the price to the public. The sale of such shares of common stock will not be registered in this offering.

(4) Includes 430,664 shares issuable to Dr. Barber upon exercise of stock options.

(5) Includes 241,500 shares issuable to Dr. Peoples upon exercise of stock options. Also includes 20,000 shares held by the George Stormont Trust for the benefit of certain family members. Dr. Peoples disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(6) Represents shares issuable to Mr. van Walsem upon exercise of stock options.

(7) Includes 1,250 shares issuable to Mr. Auchincloss upon exercise of warrants. Also includes 142,500 shares issuable to Mr. Auchincloss upon exercise of stock options. Also includes 2,000 shares held on behalf of his minor children. Mr. Auchincloss disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(8) Includes 177,987 shares issuable to Mr. Muller upon exercise of warrants. Also includes 55,830 shares held by certain trusts for the benefit of family members and 5,830 shares issuable upon exercise of warrants held by such trusts. Mr. Muller disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(9) Includes 259,125 shares issuable to Mr. Giles upon exercise of warrants. Also includes 418,770 shares held by certain entities over which Mr. Giles may be deemed to share voting and investment power with respect to such shares. Mr. Giles disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(10) Represents shares issuable to Mr. Kouba upon exercise of stock options.

(11) Includes 10,330 shares issuable to Dr. Sinskey upon exercise of warrants. Also includes 3,750 shares issuable to Chokyun Rha, Dr. Sinskey's spouse, upon exercise of options, of which Dr. Sinskey disclaims beneficial ownership except to the extent of his pecuniary interest, if any.

(12) Includes 100,000 shares held by the Williams Children's Trust for the benefit of certain family members. Dr. Williams disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

DESCRIPTION OF CAPITAL STOCK

General

Upon completion of this offering, our authorized capital stock will consist of 100,000,000 shares of common stock, par value $0.01 per share, and 5,000,000 shares of undesignated preferred stock, par value $0.01 per share. The following description of our capital stock is intended as a summary only. We refer in this section to our second amended and restated certificate of incorporation as our certificate of incorporation, and we refer to our amended and restated by-laws as our by-laws.

Common Stock

As of June 30, 2006, there were 14,749,713 shares of our common stock outstanding and held of record by approximately 121 stockholders, assuming conversion of all outstanding shares of preferred stock.

Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our common stock are entitled to receive dividends ratably, if any, as may be declared by our board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution, liquidation or winding up, holders of our common stock are entitled to share ratably in our net assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. Except as described below in "Provisions of our Certificate of Incorporation and By-Laws and Delaware Anti-Takeover Law," a majority vote of common stockholders is generally required to take action under our certificate of incorporation and by-laws.

Preferred Stock

Upon completion of this offering, our board of directors will be authorized, without action by the stockholders, to designate and issue up to an aggregate of 5,000,000 shares of preferred stock in one or more series. The board of directors can fix the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible future financings and acquisitions and other corporate purposes could, under certain circumstances, have the effect of delaying, deferring or preventing a change in control of our company and might harm the market price of our common stock.

Our board of directors will make any determination to issue such shares based on its judgment as to our company's best interests and the best interests of our stockholders. We have no current plans to issue any shares of preferred stock.

Warrants

As of June 30, 2006, warrants to purchase a total of 2,174,629 shares of our common stock were outstanding with exercise prices of $0.10 per share, $2.70 per share and $10.80 per share. These warrants expire on various dates through May 21, 2014.

Registration Rights

We entered into a stockholders' agreement, dated as of January 19, 2006, with the holders of shares of our common stock issuable upon conversion of the shares of preferred stock and other stockholders, including certain members of our management. Under this agreement, holders of shares having registration rights can demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing. All of these registration rights are subject to conditions and limitations, including the right of the underwriters of an offering to limit the number of shares included in such registration and our right to postpone a requested registration for a period of no more than 180 days if we determine that this offering would be materially detrimental to us.

Demand Registration Rights. The holders of approximately 14,543,677 shares of common stock, after this offering, subject to exceptions, are entitled to certain demand registration rights, upon the request of holders of a certain percentage of such shares, pursuant to which they may require us to file a registration statement under the Securities Act at our expense with respect to their shares of common stock. We are required to use our best efforts to effect any such registration. In addition, we have granted ADM one demand registration right with respect to the ADM Shares.

Piggyback Registration Rights. If we propose to register any of our securities under the Securities Act for our own account or the account of any other holder, the holders of approximately 14,543,677 shares of common stock, after this offering, are entitled to notice of such registration and are entitled to include shares of their common stock therein. In addition, we have granted ADM piggyback registration rights with respect to the ADM Shares.

We will pay all registration expenses, other than underwriting discounts and commissions, related to any demand or piggyback registration. The stockholders' agreement contains customary cross- indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Provisions of our Certificate of Incorporation and By-Laws and Delaware Anti-Takeover Law

Our certificate of incorporation and by-laws will, upon completion of this offering, include a number of provisions that may have the effect of encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies. In accordance with our certificate of incorporation, our board is divided into three classes serving staggered three-year terms, with one class being elected each year. Our certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No Written Consent of Stockholders. Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting.

Meetings of Stockholders. Our by-laws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our by-laws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements. Our by-laws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in the by-laws.

Amendment to By-Laws and Certificate of Incorporation. As required by the Delaware General Corporation Law, any amendment of our certificate of incorporation must first be approved by a majority of our board of directors and, if required by law or our certificate of incorporation, thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability and the amendment of our by-laws and certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our by-laws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the by-laws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Blank Check Preferred Stock. Our certificate of incorporation provides for 5,000,000 authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Section 203 of the Delaware General Corporation Law

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation's voting stock. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, the board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or
- at or after the time the stockholder became interested, the business combination was approved by the board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

NASDAQ Stock Market Listing

We have applied to the NASDAQ Global Market for the quotation of our common stock under the trading symbol MBLX.

Transfer Agent and Registrar

Upon completion of this offering, the transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company.

SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, there was no public market for our common stock. Future sales of substantial amounts of common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock. Although we have applied to have our common stock approved for quotation on the NASDAQ Global Market, we cannot assure you that there will be an active public market for our common stock.

Upon completion of this offering, we will have outstanding an aggregate of shares of common stock, assuming the issuance of shares of common stock offered hereby, the issuance of the ADM Shares and no exercise of the underwriter's overallotment option and no exercise of outstanding options or warrants. Of these shares, shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares purchased by our "affiliates," as that term is defined in Rule 144 under the Securities Act, whose sales would be subject to certain limitations and restrictions described below.

All remaining shares of common stock held by existing stockholders were issued and sold by us in reliance on exemptions from the registration requirements of the Securities Act. Of these shares, shares will be subject to "lock-up" agreements with the underwriters or us described below on the effective date of this offering. On the effective date of this offering, there will be shares that are not subject to lock-up agreements and eligible for sale pursuant to Rule 144(k). Upon expiration of the lock-up agreements 180 days after the effective date of this offering, shares will become eligible for sale, subject in most cases to the limitations of Rule 144. In addition, holders of stock options could exercise such options and sell certain of the shares issued upon exercise as described below.

Days After Date of this Prospectus	Shares Eligible for Sale	Comment
Upon Effectiveness		Freely tradable shares saleable under Rule 144(k) that are not subject to the lock-up
90 Days		Shares saleable under Rules 144 and 701 that are not subject to a lock-up
180 Days		Lock-ups released, subject to extension; shares saleable under Rules 144 and 701
Thereafter		Restricted securities held for one year or less

Lock-up Agreements

We, each of our directors and executive officers, and certain of our other stockholders, who collectively own shares of our common stock, based on shares outstanding as of , 2006, have agreed that, without the prior written consent of Piper Jaffray on behalf of the underwriters, we and they will not, subject to limited exceptions, during the period ending 180 days after the date of this prospectus, subject to extension in specified circumstances:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for common stock; or

- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock,

whether any transaction described above is to be settled by delivery of our common stock or such other securities, in cash or otherwise. Any determination to release any shares subject to the lock-up agreements would be made on a case-by-case basis based on a number of factors at the time of determination, including the market price of the common stock, the liquidity of the trading market for the common stock, general market conditions, the number of shares proposed to be sold and the timing, purpose and terms of the proposed sale. Piper Jaffray on behalf of the underwriters will have discretion in determining if, and when, to release any shares subject to lock-up agreements.

The 180-day restricted period described in the preceding paragraph will be automatically extended if: (1) during the last 17 days of the 180-day restricted period we issue an earnings release or announce material news or a material event; or (2) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 15-day period following the last day of the 180-day period, in which case the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release of the announcement of the material news or material event.

We do not currently expect any release of shares subject to lock-up agreements prior to the expiration of the applicable lock-up periods. Upon the expiration of the applicable lock-up periods, substantially all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above.

Rule 144

In general, under Rule 144 as currently in effect, beginning 90 days after the date of this prospectus, a person who has beneficially owned shares of our common stock for at least one year, including an affiliate, would be entitled to sell in "broker's transactions" or to market makers, within any three-month period, a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering; or

- the average weekly trading volume in our common stock on the NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Sales under Rule 144 are generally subject to the availability of current public information about us.

Rule 144(k)

Under Rule 144(k), a person who is not deemed to have been an affiliate of ours at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, is entitled to sell such shares without having to comply with the manner of sale, public information, volume limitation or notice filing provisions of Rule 144. Therefore, unless otherwise restricted, "144(k) shares" may be sold immediately upon the completion of this offering.

Rule 701

In general, under Rule 701, any of our employees, directors, officers, consultants or advisors who purchased shares from us in connection with a compensatory stock or option plan or other written agreement before the effective date of this offering is entitled to sell such shares 90 days after the effective date of this offering in reliance on Rule 144, without having to comply with the holding period and notice filing requirements of Rule 144 and, in the case of non-affiliates, without having to comply with the public information, volume limitation or notice filing provisions of Rule 144.

The SEC has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, along with the shares acquired upon exercise of such options, including exercises after the date of this prospectus. Securities issued in reliance on Rule 701 are restricted securities and subject to the contractual restrictions described above, beginning 90 days after the date of this prospectus, may be sold by persons other than affiliates subject only to the manner of sale provisions of Rule 144 and by affiliates without compliance with its one year minimum holding period requirements.

Stock Options

We intend to file one or more registration statements on Form S-8 under the Securities Act to register all shares of common stock subject to outstanding stock options and common stock issued or issuable under our stock plans. We expect to file the registration statement covering shares offered pursuant to our stock plans shortly after the date of this prospectus, permitting the resale of such shares by nonaffiliates in the public market without restriction under the Securities Act, but subject to the provisions of the lock-up agreements.

Registration Rights

Upon completion of this offering, the holders of approximately 14,543,677 shares of our common stock will be eligible to exercise certain rights with respect to the registration of such shares under the Securities Act. In addition, we have granted ADM registration rights with respect to the ADM Shares. See "Description of Capital Stock — Registration Rights." Upon the effectiveness of a registration statement covering these shares, the shares would become freely tradable.

UNDERWRITING

The underwriters named below have agreed to buy, subject to the terms of the purchase agreement, the number of shares listed opposite their names below. Piper Jaffray is acting as book-running manager for the offering and together with Jefferies & Company, Inc., Thomas Weisel Partners LLC and Ardour Capital Investments, LLC is acting as representative of the underwriters. The underwriters are committed to purchase and pay for all of the shares if any are purchased other than those shares covered by the over-allotment option described below.

Underwriters	Number of Shares
Piper Jaffray & Co.	
Jefferies & Company, Inc.	
Thomas Weisel Partners LLC	
Ardour Capital Investments, LLC	
Total	

The underwriters have advised us that they propose to offer the shares to the public at $ per share. The underwriters propose to offer the shares to certain dealers at the same price less a concession of not more than $ per share. The underwriters may allow and the dealers may reallow a concession of not more than $ per share on sales to certain other brokers and dealers. After this offering, these figures may be changed by the underwriters.

We have granted to the underwriters an option to purchase up to an additional shares of common stock from us, at the same price to the public, and with the same underwriting discount, as set forth in the table above. The underwriters may exercise this option any time during the 30-day period after the date of this prospectus, but only to cover over-allotments, if any. To the extent the underwriters exercise the option, each underwriter will become obligated, subject to certain conditions, to purchase approximately the same percentage of the additional shares as it was obligated to purchase under the purchase agreement.

We estimate that the total fees and expenses payable by us, excluding underwriting discounts and commissions will be approximately $ million, which includes legal, accounting and printing costs and various other fees associated with registration and listing of our common stock. The following table shows the underwriting fees to be paid to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters' over-allotment option.

	No Exercise	Full Exercise
Per share	$	$
Total	$	$

We have agreed to indemnify the underwriters against certain liabilities, including civil liabilities under the Securities Act, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

We and each of our directors, executive officers and certain of our shareholders have agreed to certain restrictions on our ability to sell additional shares of our common stock for a period of 180 days after the date of this prospectus. We have agreed not to directly or indirectly offer for sale, sell, contract to

sell, grant any option for the sale of, or otherwise issue or dispose of, any shares of common stock, options or warrants to acquire shares of common stock, or any related security or instrument, without the prior written consent of Piper Jaffray. The agreements provide exceptions for (1) sales to underwriters pursuant to the purchase agreement, (2) our sales in connection with the exercise of options granted and the granting of options to purchase up to an additional shares under our existing stock option plans and (3) certain other exceptions.

The 180-day restricted period described in the preceding paragraph will be automatically extended if: (1) during the last 17 days of the 180-day restricted period we issue an earnings release or announce material news or a material event; or (2) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 15-day period following the last day of the 180-day period, in which case the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release of the announcement of the material news or material event.

Prior to this offering, there has been no established trading market for the common stock. The initial public offering price for the shares of common stock offered by this prospectus was negotiated by us and the underwriters. The factors considered in determining the initial public offering price include the history of and the prospects for the industry in which we compete, our past and present operations, our historical results of operations, our prospects for future earnings, the recent market prices of securities of generally comparable companies and the general condition of the securities markets at the time of this offering and other relevant factors. There can be no assurance that the initial public offering price of the common stock will correspond to the price at which the common stock will trade in the public market subsequent to this offering or that an active public market for the common stock will develop and continue after this offering.

To facilitate this offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock during and after this offering. Specifically, the underwriters may over-allot or otherwise create a short position in the common stock for their own account by selling more shares of common stock than have been sold to them by us. The underwriters may elect to cover any such short position by purchasing shares of common stock in the open market or by exercising the over-allotment option granted to the underwriters. In addition, the underwriters may stabilize or maintain the price of the common stock by bidding for or purchasing shares of common stock in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in this offering are reclaimed if shares of common stock previously distributed in this offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also effect the price of the common stock to the extent that it discourages resales of the common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the NASDAQ Global Market or otherwise and, if commenced, may be discontinued at any time.

In connection with this offering, some underwriters may also engage in passive market making transactions in the common stock on the NASDAQ Global Market. Passive market making consists of displaying bids on the NASDAQ Global Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of the common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

From time to time in the ordinary course of their respective businesses, certain of the underwriters and their affiliates may in the future engage in commercial banking or investment banking transactions with us and our affiliates.

Directed Share Program

At our request, Piper Jaffray has reserved for sale as part of the underwritten offering, at the initial public offering price, up to 5% of the total number of shares offered by this prospectus, for our directors, officers, employees, business associates and other persons with whom we have a relationship. The number of shares of common stock available for sale to the general public will be reduced to the extent such persons purchase such reserved shares. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same basis as the other shares offered in this prospectus.

Notice to Prospective Investors

In relation to each member state of the European Economic Area that has implemented the Prospectus Directive (each, a relevant member state), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that relevant member state, or the relevant implementation date, it has not made and will not make an offer of shares of our common stock to the public in this offering in that relevant member state prior to the publication of a prospectus in relation to such shares which have been approved by the competent authority in that relevant member state or, where appropriate, approved in another relevant member state and notified to the competent authority in that relevant member state, all in accordance with the Prospectus Directive, except that it may, with effect from and including the relevant implementation date, make an offer of our common stock to the public in that relevant member state at any time:

- to any legal entity that is authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- to any legal entity that has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
- to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining prior consent of the underwriters; or
- in any other circumstances that do not require the publication of a prospectus pursuant to Article 3 of the Prospectus Directive.

provided that no such offer of shares shall result in a requirement for the publication of a prospectus pursuant to Article 3 of the Prospectus Directive or any measure implementing the Prospectus Directive in a relevant member state and each person who initially acquires any share or to whom any offer is made under this offering will be deemed to have represented, acknowledged and agreed that it is a "qualified investor" within the meaning of Article 2(1)(e) of the Prospectus Directive.

For purposes of this provision, the expression an "offer to the public" in any relevant member state means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe the securities, as the expression may be varied in that member state by any measure implementing the

Prospectus Directive in that member state, and the expression "Prospectus Directive" means Directive 2003/71/EC and includes any relevant implementing measure in each relevant member state.

We have not authorized and do not authorize the making of any offer of our common stock through any financial intermediary on our behalf, other than offers made by the underwriters with a view to the final placement of the common stock as contemplated in this prospectus supplement. Accordingly, no purchaser of our common stock, other than the underwriters, is authorized to make any further offer of our common stock on behalf of the sellers or the underwriters.

The shares have not been and will not be offered to the public within the meaning of the German Sales Prospectus Act (Verkaufsprospektgesetz) or the German Investment Act (Investmentgesetz). The shares have not been and will not be listed on a German exchange. No sales prospectus pursuant to the German Sales Prospectus Act has been or will be published or circulated in Germany or filed with the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht) or any other governmental or regulatory authority in Germany. This propectus does not constitute an offer to the public in Germany and it does not serve for public distribution of the shares in Germany. Neither this prospectus, not any other document issued in connection with this offering, may be issued or distributed to any person in Germany except under circumstances which do not constitute an offer to the public within the meaning of the German Sales Prospectus Act or the German Investment Act.

Each underwriter has represented, warranted and agreed that: (i) it has not offered or sold and, prior to the expiry of a period of six months from the closing date, will not offer or sell any shares to persons in the United Kingdom except to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or otherwise in circumstances which have not resulted and will not result in an offer to the public in the United Kingdom within the meaning of the Public Offers of Securities Regulations 1995; (ii) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000, or FSMA) received by it in connection with the issue or sale of any shares in circumstances in which section 21(1) of the FSMA does not apply to our company and (iii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

The shares offered pursuant to this prospectus will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to Article 652a or Article 1156 of the Swiss Federal Code of Obligations. We have not applied for a listing of the shares being offered pursuant to this prospectus on the SWX Swiss Exchange or on any other regulated securities market, and consequently, the information presented in this prospectus does not necessarily comply with the information standards set out in the relevant listing rules. The shares being offered pursuant to this prospectus have not been registered with the Swiss Federal Banking Commission as foreign investment funds, and the investor protection afforded to acquirers of investment fund certificates does not extend to acquirers of securities.

If you purchase shares of common stock offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

LEGAL MATTERS

Goodwin Procter LLP, Boston, Massachusetts, will pass upon the validity of the shares of common stock offered hereby. Latham & Watkins LLP, New York, New York, will pass upon certain legal matters relating to this offering for the underwriters. As at the date of this prospectus, Christopher J. Denn, a partner at Goodwin Procter LLP, is the beneficial owner of 5,369 shares of our common stock.

EXPERTS

The financial statements as of December 31, 2005 and 2004 and for each of the three years in the period ended December 31, 2005 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of such firm as experts in auditing and accounting.

MARKET AND INDUSTRY DATA

Unless otherwise indicated, information contained in this prospectus concerning the plastics, fuels and biofuels markets and industries, including our general expectations and market position, market opportunity and market share, is based on information from independent industry analysts and third party sources and management estimates. Management estimates are derived from publicly available information released by independent industry analysts and third party sources, as well as data from our internal research, and are based on assumptions made by us based on such data and our knowledge of such industry and markets, which we believe to be reasonable. None of the sources cited in this prospectus has consented to the inclusion of any data from its reports, nor have we sought their consent. Our internal research has not been verified by any independent source, and we have not independently verified any third party information. In addition, while we believe the market position, market opportunity and market share information included in this prospectus is generally reliable, such information is inherently imprecise. Such data involves risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors."

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-1 with the SEC for the stock we are offering by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete and you should refer to the exhibits filed as part of the registration statement for copies of the actual contract, agreement or other document. After this offering, we will file annual, quarterly and special reports, proxy statements and other information with the SEC.

You can obtain copies of our SEC filings, including the registration statement, over the Internet at the SEC's web site at *www.sec.gov*. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, NE, Washington, DC 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

You should rely on the information contained in this prospectus and in the registration statement as well as other information you deem relevant. We have not authorized anyone to provide you with

information different from that contained in this prospectus. This prospectus is an offer to sell, or a solicitation of offers to buy, securities only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale or exchange of securities. However, we have a duty to update that information while this prospectus is in use by you where, among other things, any facts or circumstances arise which, individually or in the aggregate, represent a fundamental change in the information contained in this prospectus or any material information with respect to the plan of distribution was not previously disclosed in the prospectus or there is any material change to such information in the prospectus. This prospectus does not offer to sell or solicit any offer to buy any securities other than the common stock to which it relates, nor does it offer to sell or solicit any offer to buy any of these securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

METABOLIX, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Metabolix, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows present fairly, in all material respects, the financial position of Metabolix, Inc. and its subsidiary at December 31, 2004 and 2005, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2005 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
June 26, 2006, (except for Note 14,
as to which the date is July 25, 2006).

Metabolix, Inc.

Consolidated Balance Sheets

	December 31, 2004	December 31, 2005	June 30, 2006	Pro Forma June 30, 2006
			(Unaudited)	
Assets				
Current assets				
Cash and cash equivalents	$ 3,151,673	$ 1,834,632	$ 15,224,914	$ 15,224,914
Short-term investments	1,302,906	1,339,015	646,665	646,665
Restricted cash	497,486	496,367	498,129	498,129
Accounts receivable	26,675	30,000	—	—
Unbilled receivable	399,334	430,873	956,917	956,917
Other current assets	47,855	123,709	274,206	274,206
Total current assets	5,425,929	4,254,596	17,600,831	17,600,831
Property and equipment, net	1,383,799	3,005,472	3,535,791	3,535,791
Other assets	—	64,526	907,473	907,473
Investment in related party	700,000	—	—	—
Total assets	$ 7,509,728	$ 7,324,594	$ 22,044,095	$ 22,044,095
Liabilities, Redeemable Convertible Preferred Stock and Stockholder' Equity (Deficit)				
Current liabilities				
Accounts payable	$ 1,494,883	$ 1,299,356	$ 1,300,529	$ 1,300,529
Accrued expenses	725,616	830,704	1,423,252	1,423,252
Advances on financing from investors	2,000	614,994	—	—
Current portion of capital lease obligations	118,929	62,571	14,117	14,117
Current portion of deferred rent	165,470	165,470	165,469	165,469
Convertible promissory note	299,731	—	—	—
Total current liabilities	2,806,629	2,973,095	2,903,367	2,903,367
Capital lease obligations	60,694	—	—	—
Deferred rent	1,378,911	1,213,443	1,130,708	1,130,708
Long-term deferred revenue	3,000,000	5,620,808	6,258,286	6,258,286
Other long-term liabilities	—	66,218	68,548	68,548
Total liabilities	7,246,234	9,873,564	10,360,909	10,360,909
Commitments and contingencies (Note 7)				
Redeemable convertible preferred stock (Note 9)	39,234,609	44,008,906	61,442,480	—
Stockholders' equity (deficit)				
Common stock ($0.01 par value per share); 23,000,000 shares authorized in 2004 and 2005 and 26,500,000 shares authorized in June 30, 2006; 2,212,955, 2,218,080 and 2,536,895 shares issued in 2004, 2005 and June 30, 2006, respectively; 2,199,955, 2,205,080 and 2,523,895 shares outstanding in 2004, 2005 and June 30, 2006, respectively; 14,762,713 and 14,749,713 shares issued and outstanding on a pro forma basis at June 30, 2006 (unaudited)	22,130	22,181	25,369	147,627
Treasury stock (at cost); 13,000 shares in 2004, 2005 and 2006	(35,100)	(35,100)	(35,100)	(35,100)
Additional paid-in capital	3,590,993	3,629,608	4,356,550	65,676,772
Deferred compensation	—	—	(43,313)	(43,313)
Accumulated deficit	(42,549,138)	(50,174,565)	(54,062,800)	(54,062,800)
Total stockholders' equity (deficit)	(38,971,115)	(46,557,876)	(49,759,294)	11,683,186
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	$ 7,509,728	$ 7,324,594	$ 22,044,095	$ 22,044,095

The accompanying notes are an integral part of these consolidated financial statements.

Metabolix, Inc.

Consolidated Statements of Operations

	Years Ended December 31,			Six Months Ended June 30,	
	2003	2004	2005	2005	2006
				(Unaudited)	
Revenue					
Research and development revenue	$ 120,430	$ 96,875	$ 106,462	$ 31,387	$ 2,502,450
License fee and royalty revenue					
From related parties	112,800	316,880	242,100	134,000	189,800
Other	—	75,000	—	—	—
Grant revenue	2,149,995	3,189,449	2,432,439	1,343,500	1,117,486
Total revenue	2,383,225	3,678,204	2,781,001	1,508,887	3,809,736
Operating expenses					
Research and development expenses, including cost of revenue	6,203,632	5,426,601	5,980,339	2,823,666	4,640,315
General and administrative expenses	2,692,105	3,251,800	3,825,303	2,077,846	3,397,257
Total operating expenses	8,895,737	8,678,401	9,805,642	4,901,512	8,037,572
Loss from operations	(6,512,512)	(5,000,197)	(7,024,641)	(3,392,625)	(4,227,836)
Other income (expense)					
Interest income	6,876	14,154	109,356	44,042	341,902
Interest expense	(134,430)	(68,468)	(10,142)	(11,904)	(2,301)
Loss on investment in related party	—	—	(700,000)	—	—
Net loss	$ (6,640,066)	$ (5,054,511)	$ (7,625,427)	$ (3,360,487)	$ (3,888,235)
Net loss per share					
Basic and Diluted	$ (2.73)	$ (1.37)	$ (2.09)	$ (0.92)	$ (1.06)
Number of shares used in per share calculations					
Basic and Diluted	2,436,209	3,681,823	3,640,194	3,638,144	3,655,789
Pro forma net loss per share					
Basic and Diluted (unaudited)			$ (0.60)		$ (0.25)
Pro forma number of shares used in per share calculations					
Basic and Diluted (unaudited)			12,715,068		15,397,630

The accompanying notes are an integral part of these consolidated financial statements.

Metabolix, Inc.

Consolidated Statements of Stockholders' Equity (Deficit)

	Common Stock		Treasury Stock					
	Shares	Par value	Shares	Amount	Additional Paid-in Capital	Deferred Compensation	Accumulated Deficit	Total
Balance, December 31, 2002	2,193,205	$ 21,932	13,000	$ (35,100)	$ 2,076,342	$ —	$ (30,854,561)	$ (28,791,387)
Issuance of common stock warrants in connection with Series I preferred stock financing					149,405			149,405
Issuance of common stock warrants in connection with Series J preferred stock financing					373,725			373,725
Issuance of common stock warrants in connection with an exchange of Series I preferred stock and cancellation of warrants for Series I-1 and Series J preferred stock					908,771			908,771
Exercise of common stock options	19,750	198			21,178			21,376
Stock-based compensation related to common stock options issued to nonemployees					123,554			123,554
Net loss							(6,640,066)	(6,640,066)
Balance, December 31, 2003	2,212,955	22,130	13,000	(35,100)	3,652,975	$ —	(37,494,627)	(33,854,622)
Issuance of common stock warrants in connection with Series J preferred stock financing					66,140			66,140
Issuance of common stock warrants in connection with an exchange of Series I preferred stock for Series J preferred stock					41,730			41,730
Cancellation of 189,716 shares of common stock warrants in connection with the exchange of Series J-1 and Series 04 preferred stock					(218,774)			(218,774)
Stock-based compensation related to common stock options issued to nonemployees					48,922			48,922
Net loss							(5,054,511)	(5,054,511)
Balance, December 31, 2004	2,212,955	22,130	13,000	(35,100)	3,590,993	$ —	(42,549,138)	(38,971,115)
Exercise of common stock options	5,125	51			11,593			11,644
Stock-based compensation related to common stock options issued to nonemployees					27,022			27,022
Net loss							(7,625,427)	(7,625,427)
Balance, December 31, 2005	2,218,080	22,181	13,000	(35,100)	3,629,608	$ —	(50,174,565)	(46,557,876)
Exercise of common stock warrants (unaudited)	305,034	3,051			299,769			302,820
Exercise of common stock options (unaudited)	13,781	137			28,930			29,067
Stock-based compensation related to common stock options issued to nonemployees and employees (unaudited)					398,243	(43,313)		354,930
Net loss (unaudited)							(3,888,235)	(3,888,235)
Balance, June 30, 2006 (Unaudited)	2,536,895	$ 25,369	13,000	$ (35,100)	$ 4,356,550	$ (43,313)	$ (54,062,800)	$ (49,759,294)

The accompanying notes are an integral part of these consolidated financial statements.

Metabolix, Inc.

Consolidated Statements of Cash Flows

	Years Ended December 31,			Six Months Ended June 30,	
	2003	2004	2005	2005	2006
				Unaudited	
Cash flows from operating activities					
Net loss	$ (6,640,066)	$ (5,054,511)	$ (7,625,427)	$ (3,360,487)	$ (3,888,235)
Adjustments to reconcile net loss to cash used in operating activities					
Depreciation	307,508	265,253	314,565	136,976	427,692
Stock-based compensation	123,554	48,922	27,022	2,154	354,969
Loss on investment in related party	—	—	700,000	—	—
Changes in operating assets and liabilities					
Accounts receivable	(36,848)	10,173	(3,325)	16,800	30,000
Unbilled receivable	(261,679)	180,477	(31,539)	(206,170)	(526,044)
Other current assets	(9,543)	(14,842)	(75,854)	(108,729)	(150,497)
Other assets	84,050	234,082	(64,526)	—	(842,947)
Accounts payable	928,774	(429,303)	(195,527)	(759,323)	1,173
Accrued expenses	473,126	(439,535)	105,088	617,709	594,878
Deferred rent	(30,270)	1,452,699	(165,469)	(82,735)	(82,736)
Deferred revenue	(84,050)	2,765,918	2,620,808	1,050,000	637,478
Net cash used in operating activities	(5,145,444)	(980,667)	(4,394,184)	(2,693,805)	(3,444,269)
Cash flows from investing activities					
Purchase of property and equipment	(35,182)	(1,324,397)	(1,870,019)	(53,764)	(958,012)
Restricted cash	—	(497,486)	1,119	3,241	(1,762)
Proceeds from maturity of short-term investments	—	—	1,287,521	—	17,585,098
Purchase of short-term investments	—	(1,302,906)	(1,323,630)	—	(16,892,787)
Net cash used in investing activities	(35,182)	(3,124,789)	(1,905,009)	(50,523)	(267,463)
Cash flows from financing activities					
Principal payments for capitalized lease obligations	(84,636)	(124,544)	(117,052)	(64,404)	(48,454)
Payments on convertible promissory note	(436,379)	(596,877)	(299,731)	(299,731)	—
Advances for financing from investors	—	—	612,994	—	—
Proceeds from issuance of redeemable convertible preferred stock and warrants, net of issuance costs	6,307,220	6,484,038	4,774,297	4,828,695	16,818,581
Proceeds from options exercised	21,376	—	11,644	6,413	29,067
Proceeds from warrants exercised	—	—	—	—	302,820
Net cash provided by financing activities	5,807,581	5,762,617	4,982,152	4,470,973	17,102,014
Net increase (decrease) in cash and cash equivalents	626,955	1,657,161	(1,317,041)	1,726,645	13,390,282
Cash and cash equivalents at beginning of period	867,557	1,494,512	3,151,673	3,151,673	1,834,632
Cash and cash equivalents at end of period	$ 1,494,512	$ 3,151,673	$ 1,834,632	$ 4,878,318	$ 15,224,914
Supplemental disclosure of cash flow information					
Cash paid during the period for interest	$ 93,635	$ 35,233	$ 10,141	$ 5,169	$ 2,301
Supplemental disclosure of noncash activities					
Equipment acquired under capital lease obligations	191,982	71,600	—	—	—
Conversion of advances from investors to preferred stock	—	—	—	—	(614,993)

The accompanying notes are an integral part of these consolidated financial statements.

Metabolix, Inc.

Notes to Consolidated Financial Statements

**(Information as of June 30, 2006
and the six months ended
June 30, 2006 and 2005
is unaudited)**

1. Nature of Business

Metabolix, Inc. (the "Company"), which began operations on June 19, 1992, uses advanced biotechnology to develop environmentally sustainable, economically attractive alternatives to petrochemical-based plastics, fuels and chemicals. Metabolix is a leader in applying the advanced tools of metabolic engineering and molecular biology to efficiently produce *PHA Natural Plastics* in microbial systems and directly in nonfood plant crops. In 2005 the Company determined that it is no longer a development stage enterprise due to the commencement of its principal operations, significant collaboration agreements and its revenue levels.

The Company has incurred losses since inception and expects to incur net operating losses and negative cash flows in the near term as expenditures for research and development and commercialization exceed its revenues. The Company plans to continue to seek additional financing and collaboration arrangements to fund operations. If the Company is unable to obtain cash from these sources at acceptable terms, management intends to reduce expenses so that it can continue to meet its obligations. There can be no assurance that the Company will be successful in raising additional funds or reducing spending to a sufficient level. The Company completed a preferred stock financing round in January 2006 (Note 9).

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, development by the Company's competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, the need to obtain additional funding, and compliance with government regulations.

2. Summary of Significant Accounting Policies

Unaudited Interim Financial Statements

The consolidated financial statements and related notes of the Company for the six months ended June 30, 2005 and June 30, 2006, respectively, are unaudited. Management believes the unaudited consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and include all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the financial position and results of operations in such periods. Results of operations for the six months ended June 30, 2006 are not necessarily indicative of the results that may be expected for the year ended December 31, 2006.

Unaudited Pro Forma Presentation

Unaudited pro forma net loss per share is computed using the weighted average number of common shares outstanding and warrants that can be issued with little or no consideration during the period, including the pro forma effects of automatic conversion of all outstanding redeemable convertible preferred stock into shares of the Company's common stock effective upon the assumed closing of the Company's proposed initial public offering as if such conversion had occurred at the date of original issuance.

Upon the closing of the Company's initial public offering of securities, all of the outstanding shares of Series A, B, C, D, E, F, G, I-1, J-1, 04, and 05 convertible preferred stock will automatically convert on a one-for-one basis to 12,225,818 shares of the Company's common stock. The unaudited pro forma presentation of the balance sheet has been prepared assuming the conversion of the convertible preferred stock into common stock as of June 30, 2006.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its former wholly-owned subsidiary, Metabolix Canada. The subsidiary was closed during 2005. All significant intercompany transactions were eliminated.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity date of ninety days or less at the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit.

Short-Term Investments

The Company considers all highly liquid investments with a maturity date of one year or less at the balance sheet date to be short-term investments. Short-term investments consist of certificates of deposit, for which the carrying amount approximates fair value as of December 31, 2004 and 2005. As of June 30, 2006, the Company held a corporate bond of $646,665.

Restricted Cash

The Company has restricted cash consisting of a certificate of deposit supporting a letter of credit, of $496,367 and $498,129 at December 31, 2005 and June 30, 2006, respectively, in connection with its leased facility.

Comprehensive Income (Loss)

Statement of Financial Accounting Standards No. 130, *Reporting Comprehensive Income* ("SFAS No. 130"), requires that changes in comprehensive income be shown in the financial statements with the same prominence as other financial statements. For all periods presented the Company's net loss is equal to comprehensive loss and as a result separate disclosure is not necessary.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk primarily consist of cash and cash equivalents and short-term investments. The Company invests its excess cash and cash equivalents in interest bearing certificates of deposit of a major U.S. bank. Accordingly, management believes these investments are subject to minimal credit and market risk and are of high credit quality.

At December 31, 2004 and 2005, all of the Company's unbilled receivables were due under U.S. government grants and credit risk is considered minimal. Additionally, all grant revenues were related to U.S. government grants for all periods presented.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments as of December 31, 2004 and 2005, which include cash equivalents, accounts receivable, unbilled receivable, accounts payable, accrued expenses, promissory note and advances on financing from investors, approximate their fair values due to the short-term nature of these instruments.

Segment Information

Statement of Financial Accounting Standards No. 131, *Disclosures about Segments of an Enterprise and Related Information (*"SFAS 131"), establishes standards for reporting information on operating segments in interim and annual financial statements. The Company operates in one segment, which is the business of developing technologies for the production of polymers and chemicals in plants and in microbes. The chief operating decision-makers review the Company's operating results on a consolidated basis and manage operations as a single operating segment.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Repairs and maintenance are charged to operations as incurred. Gains and losses on the disposition of equipment are recorded in net income or loss and the related cost and accumulated depreciation are removed from the respective accounts. Depreciation is computed using the straight-line method over the estimated useful lives as follows:

	Estimated Useful Life
Equipment	2 1/2 - 3 years
Furniture and Fixtures	5
Software	3
Capital leases and leasehold improvements	Shorter of life or term of lease

The Company accounts for operating lease incentive payments received from the lessor in accordance with Statement of Financial Accounting Standards No. 13, *Accounting for Leases* ("SFAS 13"). Under SFAS 13, leasehold improvements made by a lessee that are funded by landlord incentives or allowances under an operating lease should be recorded by the lessee as leasehold improvement assets and amortized over the shorter of their economic lives or the lease term. The Company records landlord incentive received as deferred rent and amortizes those amounts as reductions to lease expense over the lease term.

Impairment of Long-Lived Assets

The Company accounts for the impairment and disposal of long-lived assets utilizing Statement of Financial Accounting Standards No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* ("SFAS 144"). SFAS 144 requires that long-lived assets, such as property, plant and equipment, and purchased intangible assets subject to amortization, be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. SFAS No. 144 further refines the requirements of Statement of Financial Accounting Standards No. 121, *Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to be Disposed of* ("SFAS No. 121"), that companies (1) recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable based on its undiscounted future cash flows and (2) measure an impairment loss as the difference between the carrying amount and fair value of the asset.

Redeemable Convertible Preferred Stock

The preferred stock contains certain redemption features that are considered outside the control of the Company, including redemption upon a change in control. Therefore the Company presents redeemable convertible preferred stock as temporary equity in the mezzanine level of the consolidated balance sheet.

Research and Development Expenses

All costs associated with internal research and development as well as research and development services conducted for others are expensed as incurred. Research and development expenses include direct costs for salaries, employee benefits, subcontractors, facility related expenses, depreciation and stock-based compensation related to employees and non-employees involved in the company's research and development. Costs related to revenue-producing contracts are recorded as research and development expenses.

Revenue Recognition

The Company recognizes revenue in accordance with the Staff Accounting Bulletin No. 104, *Revenue Recognition* ("SAB 104"), and Emerging Issues Task Force (EITF) Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*, for all revenue transactions entered into in fiscal periods beginning after June 15, 2003. Principal sources of revenue are government grants, license fees, royalty revenues and research and development payments that are primarily derived from collaborative agreements with other companies.

The Company's research and development revenue includes research services and delivery of specified materials or sample product produced resulting from the research services and revenue is recognized upon completion of the related services.

Fees to license the use of the Company's proprietary and licensed technologies in research performed by the customer are recognized only after both the license period has commenced and the technology has been delivered. Royalty revenue is recognized when it becomes determinable and collectibility is reasonably assured, otherwise the Company recognizes revenue upon receipt of payment.

The Company analyzes its multiple element arrangements to determine whether the elements can be separated and accounted for individually as separate units of accounting in accordance with EITF No. 00-21. The Company recognizes up-front license payments or technology access fees as revenue if the license or access fee has stand-alone value and the fair value of the undelivered items can be determined. If the license is considered to have stand-alone value but the fair value of any of the undelivered services or items cannot be determined, the license payments are initially deferred and recognized as revenue over the period of performance of undelivered services or as undelivered items are delivered.

Revenue from milestone payments related to arrangements under which the Company has continuing performance obligations are recognized as revenue upon achievement of the milestone only if all of the following conditions are met: the milestone payments are nonrefundable; achievement of the milestone was not reasonably assured at the inception of the arrangement; substantive effort is involved in

achieving the milestone; and the amount of the milestone is reasonable in relation to the effort expended or the risk associated with the achievement of the milestone. If any of these conditions are not met, the milestone payments are deferred and recognized as revenue over the term of the arrangement as the Company completes its performance obligations.

Government research grants that provide for payments to the Company for work performed are recognized as revenue when the related expense is incurred and the Company has obtained governmental approval to use the grant funds for agreed upon budgeted expenses. Government grant revenue is earned as research expenses related to the grants are incurred.

Intellectual Property Costs

The Company includes all costs associated with the prosecution and maintenance of patents within general and administrative expenses in the consolidated statement of operations.

Stock-Based Compensation

Prior to January 1, 2006, as permitted by Statement of Financial Accounting Standards No. 123, *Accounting for Stock-Based Compensation* ("SFAS No. 123"), the Company accounted for its stock-based awards to employees and directors using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25 ("APB No. 25"), *Accounting for Stock Issued to Employees*, and related interpretations. The Company recognizes compensation expense for stock options granted to nonemployees in accordance with the requirements of SFAS No. 123 and Emerging Issues Task Force ("EITF") Issue No. 96-18, *Accounting for Equity Instruments that Are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services* ("EITF 96-18"). EITF 96-18 requires that such equity instruments be recorded at their fair value at the measurement date, which is generally the vesting date of the instruments. Therefore, the measurement of stock-based compensation is subject to periodic adjustments as the underlying equity instruments vest.

On January 1, 2006, the Company adopted Statement of Financial Accounting Standards No. 123(R), *Share-Based Payments* ("SFAS No. 123(R)"). Under the provisions of SFAS No. 123(R), compensation cost recognized for the six months ended June 30, 2006 includes compensation cost for all share-based payments granted subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123(R) and will be recognized over the vesting period of the applicable award on a straight-line basis. The effect of adopting SFAS No. 123(R) for the six months ended June 30, 2006 was an increase in net loss by $88,801 and a $0.02 increase to basic and diluted net loss per share. There is no expense recorded for options which were granted prior to January 1, 2006 under the minimum value method and with an exercise price equal to the fair value of common stock and that had a fixed measurement date at the time of grant.

Had compensation expense been determined based on the fair value of the options at the grant date consistent with the provisions of SFAS No. 123, the Company's net loss would have increased to the pro forma amounts below:

	Years Ended December 31,		
	2003	2004	2005
Net loss as reported	$ (6,640,066)	$ (5,054,511)	$ (7,625,427)
Add stock-based employee compensation expense included in reported net loss	—	—	—
Deduct stock-based employee compensation expense determined under fair value method	(80,316)	(32,264)	(106,255)
Net loss — pro forma	$ (6,720,382)	$ (5,086,775)	$ (7,731,682)
Net loss per share, as reported			
Basic and Diluted	$ (2.73)	$ (1.37)	$ (2.09)
Pro forma net loss per share			
Basic and Diluted	$ (2.76)	$ (1.38)	$ (2.12)
Number of shares used in per share calculations			
Basic and Diluted	2,436,209	3,681,823	3,640,194

Pursuant to the requirements of SFAS No. 123, for the three years ended December 31, 2005 the Company had estimated the fair value of its stock options, by applying the minimum value method which does not consider expected volatility of the underlying stock using the following assumptions and for the six months ended June 30, 2006, the Company determined the fair value of stock options using the Black-Scholes option pricing model with the following assumptions for option grants, respectively:

	Years Ended December 31,			
	2003	2004	2005	Six Months Ended June 30, 2006
Expected dividend yield	—	—	—	—
Risk-free interest rate	3.77%	4.08%	4.22%	4.89%
Expected option term (in years)	5	5	5	6.1
Volatility	—	—	—	75%

For the six months ended June 30, 2006, expected volatility is based on review of historical volatilities for similar companies as adjusted to anticipate increased expected volatility associated with being a newly public company. Management believes that the historical volatility of the Company's stock price does not best represent the expected volatility of the stock price.

The risk-free interest rate used for each grant is equal to the U.S. Treasury yield curve in effect at the time of grant for instruments with a similar expected life.

2. Summary of Significant Accounting Policies (Continued)

For the period ended June 30, 2006, the expected term of the options granted was determined using the "simplified" method for "plain vanilla" options as permitted by Staff Accounting Bulletin No. 107.

The stock price volatility and expected terms utilized in the calculation involve management's best estimates at that time, both of which impact the fair value of the option calculated under the Black-Scholes methodology and, ultimately, the expense that will be recognized over the life of the option. SFAS 123R also requires that the Company recognize compensation expense for only the portion of options that are expected to vest. Therefore, the Company has estimated expected forfeitures of stock options for the grants valued. In developing a forfeiture rate estimate, the Company considered its historical experience, its growing employee base and the limited liquidity of its common stock. If the actual number of forfeitures differs from those estimated by management, additional adjustments to compensation expense may be required in future periods.

Earnings per Share

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding and warrants outstanding that were previously issued for little or no consideration, excluding the dilutive effects of common stock equivalents. Common stock equivalents include stock options, certain warrants and convertible securities. Diluted net income per share assumes the conversion of all outstanding shares of redeemable convertible preferred stock using the "if converted" method, if dilutive, and includes the dilutive effect of common stock equivalents under the treasury stock method.

The number of shares of potentially dilutive common stock related to redeemable convertible preferred stock, options and warrants that were excluded from the calculation of dilutive shares since the inclusion of such shares would be anti-dilutive for the years ended December 31, 2003, 2004, 2005, and the periods ended June 30, 2005 and 2006 are shown below:

				Six Months Ended June 30,	
	2003	2004	2005	2005	2006
				(Unaudited)	(Unaudited)
Redeemable convertible preferred stock	5,628,788	8,412,166	9,305,818	9,305,818	12,225,818
Common stock options	833,675	933,175	2,492,410	1,306,050	2,796,077
Common stock warrants	965,951	1,149,132	1,149,132	1,149,132	1,016,687
	7,428,414	10,494,473	12,947,360	11,761,000	16,038,582

Foreign Currency Translation

The financial statements of the Company's former wholly-owned Canadian subsidiary which ceased to exist during 2005, were remeasured using the U.S. dollar as the functional currency. Monetary assets and liabilities were translated using the current exchange rate. Nonmonetary assets and liabilities are remeasured using historical exchange rates. Revenue and expenses were remeasured using average exchange rates for the period, except for items related to nonmonetary assets and liabilities, which are translated using historical exchange rates. All remeasurement gains and losses were included in determining net loss for the period in which exchange rates change and were immaterial for all years presented.

Income Taxes

The Company follows the provisions of Statement of Financial Accounting Standards No. 109, *Accounting for Income Taxes* ("SFAS No. 109"). SFAS No. 109 requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is provided to reduce the deferred tax asset to a level which, more likely than not, will be realized.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS No. 123(R), which replaces SFAS No. 123 and supersedes APB No. 25. SFAS No. 123(R) which requires all share-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values. The Company implemented SFAS No. 123(R) in the reporting period beginning January 1, 2006, which resulted in a material effect on its stock compensation expense for the period ended June 30, 2006. The Company expects stock compensation expense to materially increase in future periods as a result of the adoption of this standard and future possible stock grant activity.

In April 2005, the FASB issued FASB Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations—an interpretation of FASB Statement No. 143* (FIN No. 47). FIN No. 47 expands on the accounting guidance of Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations* (SFAS No. 143), providing clarification of the term, conditional asset retirement obligation, and guidelines for the timing of recording the obligation. The interpretation is effective for fiscal years ending after December 15, 2005. The Company adopted FIN No. 47 and has recorded a long-term liability for its asset retirement obligations of $66,218 and an associated non-current asset of $64,615 at December 31, 2005 which represents the contractual obligations associated with the potential removal of a leasehold addition constructed during 2005.

In May 2005, the FASB issued Statement of Financial Accounting Standards No. 154, *Accounting Changes and Error Corrections*, a replacement of APB Opinion No. 20, *Accounting Changes*, and FASB issued Statement of Financial Accounting Standards No. 3, *Reporting Accounting Changes in Interim Financial Statements* ("SFAS No. 154"). SFAS No. 154 requires retrospective application to prior period financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. This statement requires that retrospective application of a change in accounting principle be limited to the direct effects of a change. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005.

In July, 2006 the FASB issued Financial Accounting Standards Interpretation No. (FIN) 48, *Accounting for Uncertainty in Income Taxes*. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprises' financial statements in accordance with SFAS No. 109. FIN 48 prescribes a recognition threshold and measurement attributable for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. FIN 48 is effective for fiscal years beginning after December 15, 2006. The adoption of this statement is not expected to have a material impact on the Company's consolidated financial position or results of operations.

3. Significant Collaborations

ADM Agreement

On November 3, 2004, the Company signed an agreement with ADM Polymer Corporation ("ADM"), a subsidiary of Archer Daniels Midland Company, to establish an alliance whereby the Company would provide technology and licenses thereto and research and development services, and ADM would provide manufacturing services and capital necessary to produce *PHA Natural Plastics* on a commercial scale basis. This agreement was amended by the parties on September 8, 2005 to define certain cost sharing activities related to pilot manufacturing, to change certain milestones and make other minor modifications. The arrangement is comprised of two primary agreements: (1) the Technology Alliance and Option Agreement and (2) the Commercial Alliance Agreement.

Technology Alliance and Option Agreement

The goal of the Technology Alliance and Option Agreement is to demonstrate the capabilities of the Company's fermentation and recovery technologies at commercial scale and to prepare a master plan and budget for the construction of a 50,000 ton commercial manufacturing facility, which would provide the basis for entering into the Commercial Alliance Agreement.

The Technology Alliance and Option Agreement provides ADM with an option (the "Option") to enter into a commercial alliance for further research, development, manufacture, use and sale of *PHA Natural Plastics* on the terms and conditions set forth in the Commercial Alliance Agreement (see below). The Option is exercisable by ADM under certain conditions at any time until 30 days after the expiration of the term of the Technology Alliance and Option Agreement. This Agreement was scheduled to expire on October 6, 2006. On July 12, 2006, ADM exercised the Option (see Note 14).

Under the Technology Alliance and Option Agreement, ADM made a nonrefundable, noncreditable upfront payment of $3,000,000 to the Company in 2004. In May 2006, the Company received a $2,000,000 payment from ADM in recognition of achieving certain technical goals under the Technology Alliance and Option Agreement (unaudited). Due to future obligations of the Company under the agreements for which fair value cannot be determined, including the requirement to provide research and development activities and recovery services under the Technology Alliance and Option Agreement and certain manufacturing services, including formulation, and sales and marketing activities and other services under the Commercial Alliance Agreement (as discussed below), the entire upfront payment and milestone payment received have been recorded as deferred revenue. The Company's policy is to expense, as period costs, the direct and incremental costs incurred associated with this collaboration.

In connection with the 2005 amendment, ADM agreed to reimburse the Company for one-half of certain costs incurred by the Company related to the Company's establishment of pilot manufacturing capabilities. If the Technology Alliance was terminated without ADM exercising its Option to enter into a commercial alliance, the Company would have been required to refund to ADM a portion of these reimbursements. Amounts reimbursed in 2005 and during the six month period ended June 30, 2006, totaled approximately $620,000 and $587,000, respectively, and have been recorded as deferred revenue.

Revenue recognition for amounts deferred through June 30, 2006 are expected to commence approximately at the time of the first commercial sale of *PHA Natural Plastics* (see Commercial Alliance Agreement below) and amounts will be recognized proportionately over the period that the final services are provided over the remaining term of the Commercial Alliance Agreement.

Commercial Alliance Agreement

The Commercial Alliance Agreement specifies the terms and structure of the relationship between the Company and ADM once the Option is exercised by ADM. As of December 31, 2005 and June 30, 2006, the Option had not been exercised (see Note 14). The primary goal of this agreement is to establish the activities and obligations of the Company and ADM by which the parties will commercialize *PHA Natural Plastics*. These activities include: the establishment of a Joint Sales Company (JSC) to market and sell *PHA Natural Plastics*, the construction of a manufacturing facility capable of producing 50,000 tons of material annually, the licensing of technology to the JSC and to ADM, and the conducting of various research, development, manufacturing, sales and marketing, formulation and administrative services by the parties.

The JSC will be a limited liability company, formed and equally owned by the Company and ADM, and is intended to: (i) serve as the commercial entity to establish and develop the commercial market for the *PHA Natural Plastics*, and conduct the marketing and sales in accordance with the goals of the commercial alliance, (ii) assist in the coordination and integration of the manufacturing, formulation and marketing activities, and (iii) administer and account for financial matters on behalf of the parties. The Company and ADM will each have 50% equity and voting interest in the JSC.

A summary of the key activities under this agreement is as follows: (i) ADM will arrange for and finance the construction of a facility in which it will manufacture *PHA Natural Plastics* under contract to the JSC; (ii) the Company will either arrange for and finance the acquisition or construction of a facility in which it will formulate PHA materials or it will arrange for third parties to formulate the *PHA Natural Plastics*; (iii) the Company, acting in the name and on behalf of the JSC, will establish the initial market for the *PHA Natural Plastics*. The Company will also continue its research and development efforts to further advance the technology and expand and enhance the commercial potential of PHA materials. Subject to certain limitations, ADM will finance the working capital requirements of the JSC.

The JSC will make up to twelve payments of $1,575,000 per calendar quarter to the Company to support these activities during the construction of the Commercial Manufacturing Facility. In the event construction is completed and sale of commercial product commences prior to the JSC making all twelve such payments, the quarterly payments will cease, and the JSC will pay the Company a lump sum equal to the number of remaining unpaid payments multiplied by $250,000.

Upon the commencement of commercial sales, the JSC will pay the Company royalties on sales as well as reimburse it for the cost of services provided pursuant to the agreement.

While the JSC will be a fifty-fifty joint venture, ADM will be advancing a disproportionate share of the financial capital needed to construct the manufacturing plant and to fund the activities of the JSC. Therefore, a preferential distribution of cash flow will be used, whereby all profits (after payment of all royalties, reimbursements and fees) from the JSC shall be distributed to ADM until ADM's disproportionate investment in the JSC has been returned in full. Once ADM has recouped such amounts, the profits of the JSC shall be distributed in equal amounts to the parties.

The Commercial Alliance Agreement provides for expansion of the operations of the JSC beyond the initial license of 50,000 tons annual production through an equally owned joint venture. While certain principles of the joint venture have been agreed to, the detailed terms and conditions will not be determined until a later date.

The agreements include detailed provisions setting out the rights and obligations of the parties in the event of a termination of the Commercial Alliance. These provisions include the right for parties to

terminate the Commercial Alliance upon a material default of a material obligation by the other party after a notice and cure period has expired. The parties are also permitted to terminate the Commercial Alliance if a change in circumstances that is not reasonably within the control of a party makes the anticipated financial return from the project inadequate or too uncertain. Finally, the parties have specific obligations to fulfill in the event of termination or if they file for bankruptcy protection.

BP America Production Company

On February 14, 2005, the Company signed a joint development agreement with BP America Production Company ("BP") to advance the Company's technology for producing PHA polymers in plants and to conduct an evaluation of the potential for using PHA producing plants in a biomass to energy system. In exchange for the Company completing certain research and development activities, the agreement provided for BP to pay the Company $500,000 at the start of each calendar quarter during the term of the agreement with the first two such payments due within five days of the effective date of the agreement. The Company received $2,000,000 in 2005 related to this agreement. Due to these amounts being applicable for determining BP's equity participation in a potential future joint venture between the parties, these amounts were recorded as deferred revenue at December 31, 2005.

In January 2006, the Company received notice of termination from BP with respect to the joint development agreement and as a result, there will no longer be any continuing obligations from either party. During the six months ended June 30, 2006, the Company recognized $2,500,000 in revenue from the BP arrangement, consisting of the $2,000,000 of deferred revenue and the $500,000 final payment due under the arrangement, which was received in June 2006 (unaudited).

4. Property and Equipment

Property and equipment consist of the following:

	December 31,		June 30, 2006
	2004	2005	
			(Unaudited)
Equipment	$ 1,810,395	$ 2,011,264	$ 2,207,285
Equipment under lease	342,539	249,030	188,950
Furniture and Fixtures	21,071	24,255	55,542
Leasehold improvements	1,284,020	3,104,947	3,894,059
Software	19,773	22,938	22,938
Total property and equipment, at cost	3,477,798	5,412,434	6,368,774
Less: Accumulated depreciation	(2,093,999)	(2,406,962)	(2,832,983)
Property and equipment, net	$ 1,383,799	$ 3,005,472	$ 3,535,791

Depreciation expense for the six months ended June 30, 2005 and 2006 and for the years ended December 31, 2003, 2004 and 2005 was $136,976 (unaudited), $427,692 (unaudited), $307,508, $265,253 and $312,964, respectively. Accumulated depreciation for equipment acquired under capital leases was $225,964 and $200,750, respectively, as of December 31, 2004 and 2005.

During 2004 the Company received a lease incentive payment of $1,521,045 from its lessor for leasehold improvements. In accordance with SFAS No. 13, the Company has recorded the leasehold improvements as an asset and is amortizing them over their useful life, along with a corresponding deferred rent liability that will be amortized as a reduction of lease expense over the remaining term of the lease.

5. Convertible Promissory Note

In conjunction with the purchase of certain technology in 2001, the Company issued a promissory note in the amount of $2,000,000. The note accrued interest beginning January 2002 at a rate of 10% per annum, through March 2005. Payments due on the promissory note were due in quarterly installments of $142,857 through March 2005. At December 31, 2005, the convertible promissory note had been repaid in full.

6. Accrued Expenses

Accrued expenses consist of the following:

	December 31,		June 30,
	2004	2005	2006
			(Unaudited)
Intellectual property costs	$ 111,938	$ 92,104	$ 105,459
Contracted research and development	31,805	126,259	9,383
Professional services	299,128	497,295	561,470
Tolling fees	—	—	220,000
Other	282,745	115,046	526,940
Total accrued expenses	$ 725,616	$ 830,704	$ 1,423,252

7. Commitments and Contingencies

Leases

The Company leases its facility under an operating lease, which expires in May 2014. The Company leases equipment under capital leases with various rates of interest, ranging from 10.07% to 15.71%,

with expiration dates through August 2006. All commitments are collateralized by equipment under lease. Rental payments under operating leases for the years ended December 31, 2003, 2004 and 2005, were $484,003, $590,169 and $834,148, respectively. The deferred rent liability recorded on the balance sheet includes the unamortized balance of the landlord incentive payments and the cumulative difference between actual facility lease payments and lease expense recognized ratably over the operating lease period. At December 31, 2005, the Company's future minimum payments required under operating and capital leases are as follows:

	Operating	Capital
2006	$ 988,185	$ 65,001
2007	988,185	—
2008	988,185	—
2009	988,185	—
2010	988,185	—
2011 and thereafter	3,443,948	—
Total commitments and contingencies	$ 8,384,873	65,001
Less: Amount representing interest		(2,430)
Present value of minimum lease payments		62,571
Less: Current portion		(62,571)
Capital leases — long term		$ —

Patent Action

The Procter & Gamble Company ("P&G") filed a nullity action on March 8, 2005 in Germany seeking to revoke the German equivalent of one of the Company's patents. The patent is licensed by the Massachusetts Institute of Technology ("MIT") exclusively to the Company. The Company is controlling the response to the nullity action, at the Company's expense, with MIT's cooperation.

The Company believes this nullity action is without merit and intends to vigorously defend this patent. The Company is unable to determine the potential outcome at this time and has not reserved for any potential liability in this matter at either December 31, 2005 or June 30, 2006.

Funded Research Arrangements

The Company has entered into various arrangements with universities and other unrelated third parties to perform certain research and development activities. As of June 30, 2006, the Company has committed funding of approximately $299,491 to these universities and unrelated parties. Certain of these arrangements also contain provisions for future royalties to be paid by the Company on sales of

products developed under the arrangements. The Company has the right in most arrangements to terminate the relationship by giving written notice, after which the Company would be liable for services rendered to date under the arrangement.

License Agreement with Massachusetts Institute of Technology ("MIT")

The Company's exclusive license agreement with MIT requires the Company to pay annual license fees of $25,000 and additional potential royalty payments to MIT based on a percentage of net sales of products or services covered by a patent that is subject to the license. There are no material license fees or royalties accrued at December 31, 2004, 2005 and approximately $27,000 accrued at June 30, 2006.

8. Related Party Transactions

Tepha, Inc.

During 1999, the Company entered into a sublicense agreement with Tepha, Inc. ("Tepha"), to sublicense technology to Tepha. The Company's director, Dr. Williams, is the president, chief executive officer and a director of Tepha. In addition, the Company directors Messrs. Muller and Giles and Dr. Sinskey serve on the Board of Directors of Tepha. The agreement with Tepha contains provisions for sublicense maintenance fees to be paid to the Company upon Tepha achieving certain financing milestones and for product related milestone payments. Under the agreement, the Company will also receive royalties on net sales of licensed products or sublicensing revenues received by Tepha, subject to a minimum payment each year.

In December 2002, the Company amended this agreement to provide that $800,000 of Tepha's payment obligation pursuant to the agreement became payable in both cash and equity. In October 2002, Tepha paid the Company $100,000 and the balance of the payment obligation was satisfied in December 2002 through the issuance of 648,149 shares of Tepha's Series A redeemable convertible preferred stock. The Company licensed or sublicensed additional technology to Tepha in subsequent periods. The Company recognized license and royalty revenues of $112,800, $316,880, $242,100 and $189,800 from Tepha for the years ended December 31, 2003, 2004, 2005 and six months ended June 30, 2006 (unaudited), respectively.

The Company reviewed the preferred stock investment in Tepha for other than temporary impairment in accordance with Statement of Financial Accounting Standard No. 115, *Accounting for Certain Investments in Debt and Equity Securities* ("SFAS No. 115") and determined that at December 31, 2005, its investment was fully impaired based on its current fair value and, therefore, recorded an asset impairment charge of $700,000 in 2005.

8. Related Party Transactions (Continued)

ADM

The Company's collaborative partner ADM made a $5,000,000 investment in the Company as part of the Series 05 redeemable convertible preferred stock issuance in January 2006 (Note 9). ADM makes various payments to the Company under the collaborative agreements signed during November 2004 and July 2006 (Notes 3 and 14.)

Dr. ChoKyun Rha

The Company retained Dr. ChoKyun Rha, a related party, to serve as an advisor for the purpose of building and managing business relationships in Asia. Dr. Rha is the spouse of a director of the Company. In consideration for Dr. Rha's services, on September 20, 2005, the Company granted her a nonqualified stock option for the purchase of 20,000 shares of the Company's common stock, vesting over a period of four years, with an exercise price of $1.35 per share, which was the fair market value per share of the common stock at the date of grant of the option (Note 11).

9. Redeemable Convertible Preferred Stock

At December 31, 2005 the total number of shares of all classes of stock which the Company had authorization to issue was 41,600,000, consisting of 18,600,000 shares of $0.01 par value preferred stock, and 23,000,000 shares of $0.01 par value common stock.

Redeemable convertible preferred stock consists of the following at December 31:

	2003			
	Number of Shares Authorized	Shares Outstanding	Liquidation Preference	Carrying Value
Series A preferred stock	1,033,000	1,033,000	$ 1,177,620	$ 1,177,279
Series B preferred stock	396,000	396,000	633,600	633,600
Series C preferred stock	785,000	785,000	1,884,000	1,884,000
Series D preferred stock	733,000	733,000	3,371,800	3,374,732
Series E preferred stock	420,751	420,751	4,544,111	4,515,903
Series F preferred stock	186,899	186,899	2,018,509	2,018,509
Series G preferred stock	312,119	312,119	3,370,885	3,370,885
Series H preferred stock	300,000	—	—	—
Series I preferred stock	1,437,945	36,918	398,714	335,220
Series I-1 preferred stock	1,437,945	192,147	2,075,188	1,800,000
Series J preferred stock	1,837,945	1,532,954	16,555,903	13,529,539
Series J-1 preferred stock	1,837,945	—	—	—
	10,718,549	5,628,788	$ 36,030,330	$ 32,639,667

	2004			
	Number of Shares Authorized	Shares Outstanding	Liquidation Preference	Carrying Value
Series A preferred stock	1,033,000	1,033,000	$ 1,177,620	$ 1,177,279
Series B preferred stock	396,000	396,000	633,600	633,600
Series C preferred stock	785,000	785,000	1,884,000	1,884,000
Series D preferred stock	733,000	733,000	3,371,800	3,374,732
Series E preferred stock	420,751	420,751	4,544,111	4,515,903
Series F preferred stock	186,899	186,899	2,018,509	2,018,509
Series G preferred stock	312,119	312,119	3,370,885	3,370,885
Series H preferred stock	300,000	—	—	—
Series I-1 preferred stock	192,147	192,147	2,075,188	1,800,000
Series J preferred stock	1,627,242	—	—	—
Series J-1 preferred stock	1,627,242	2,000	21,600	19,010
Series 04 preferred stock	4,458,188	4,351,250	23,496,750	20,440,691
Series 04-1 preferred stock	4,458,188	—	—	—
	16,529,776	8,412,166	$ 42,594,063	$ 39,234,609

	2005			
	Number of Shares Authorized	Shares Outstanding	Liquidation Preference	Carrying Value
Series A preferred stock	1,033,000	1,033,000	$ 1,177,620	$ 1,177,279
Series B preferred stock	396,000	396,000	633,600	633,600
Series C preferred stock	785,000	785,000	1,884,000	1,884,000
Series D preferred stock	733,000	733,000	3,371,800	3,374,732
Series E preferred stock	420,751	420,751	4,544,111	4,515,903
Series F preferred stock	186,899	186,899	2,018,509	2,018,509
Series G preferred stock	312,119	312,119	3,370,885	3,370,885
Series H preferred stock	300,000	—	—	—
Series I-1 preferred stock	192,147	192,147	2,075,188	1,800,000
Series J preferred stock	1,627,242	—	—	—
Series J-1 preferred stock	1,627,242	2,000	21,600	19,010
Series 04 preferred stock	5,458,188	5,244,902	28,322,471	25,214,988
Series 04-1 preferred stock	5,458,188	—	—	—
	18,529,776	9,305,818	$ 47,419,784	$ 44,008,906

At June 30, 2006, the total number of shares of all stock which the Company has authorized to issue is 47,400,000 (unaudited), consisting of 20,900,000 (unaudited) shares of $0.01 par value preferred stock, and 26,500,000 (unaudited) shares of $0.01 par value common stock.

Redeemable convertible preferred stock consists of the following at June 30:

	2006 (Unaudited)			
	Number of Shares Authorized	Shares Outstanding	Liquidation Preference	Carrying Value
Series A preferred stock	1,033,000	1,033,000	$ 1,177,620	$ 1,177,279
Series B preferred stock	396,000	396,000	633,600	633,600
Series C preferred stock	785,000	785,000	1,884,000	1,884,000
Series D preferred stock	733,000	733,000	3,371,800	3,374,732
Series E preferred stock	420,751	420,751	4,544,111	4,515,903
Series F preferred stock	186,899	186,899	2,018,509	2,018,509
Series G preferred stock	312,119	312,119	3,370,885	3,370,885
Series I-1 preferred stock	192,147	192,147	2,075,188	1,800,000
Series J-1 preferred stock	2,000	2,000	21,600	19,010
Series 04 preferred stock	5,244,902	5,244,902	28,322,471	25,214,988
Series 04-1 preferred stock	5,244,902	—	—	—
Series 05 preferred stock	2,920,000	2,920,000	17,520,000	17,433,574
Series 05-1 preferred stock	2,920,000	—	—	—
	20,390,720	12,225,818	$ 64,939,784	$ 61,442,480

9. Redeemable Convertible Preferred Stock

The following table depicts the preferred stock activity for the years ended December 31, 2003, 2004, 2005 and the period ended June 30, 2006:

	Series A-H Redeemable Preferred Stock		Series I & I-1 Redeemable Preferred Stock		Series J & J-1 Redeemable Preferred Stock		Series 04 & 04-1 Redeemable Preferred Stock		Series 05 Redeemable Preferred Stock		Total Redeemable Preferred Stock	
	Shares	Value	Shares	Value	Shares	Value	Shares	Value	Shares	Value	Shares	Value
Balance, December 31, 2002	3,866,769	$ 16,974,908	1,167,241	$ 10,789,439	—	$ —	—	$ —	—	$ —	5,034,010	$ 27,764,347
Issuance of Series I preferred stock and common stock warrants, net of issuance costs of $74,268			270,704	2,699,931							270,704	2,699,931
Issuance of Series J preferred stock and common stock warrants for cash and upon conversion of notes payable and accrued expenses, net of issuance costs of $42,115					324,074	3,084,160					324,074	3,084,160
Exchange of 1,401,027 shares of Series I preferred stock and cancellation of warrants for 192,147 shares of Series I-1 preferred stock and 1,208,880 shares of Series J preferred stock and issuance of warrants			(1,208,880)	(11,354,150)	1,208,880	10,445,379					—	(908,771)
Balance, December 31, 2003	3,866,769	16,974,908	229,065	2,135,220	1,532,954	13,529,539	—	—	—	—	5,628,788	32,639,667
Issuance of Series J preferred stock and common stock warrants, net of issuance costs of $12,015					57,370	541,440					57,370	541,440
Exchange of 36,918 shares of Series I preferred stock for 36,918 shares of Series J preferred stock and issuance of warrants			(36,918)	(335,220)	36,918	293,490					—	(41,730)
Exchange of 1,627,242 shares of Series J preferred stock for 2,000 shares of Series J-1 preferred stock and 3,250,484 shares of Series 04 preferred stock and cancellation of 189,716 shares of common stock warrants					(1,625,242)	(14,345,459)	3,250,484	14,564,233			1,625,242	218,774
Issuance of Series 04 preferred stock, net of issuance costs of $67,678							1,100,766	5,876,458			1,100,766	5,876,458
Balance, December 31, 2004	3,866,769	16,974,908	192,147	1,800,000	2,000	19,010	4,351,250	20,440,691	—	—	8,412,166	39,234,609
Issuance of Series 04 preferred stock, net of issuance costs of $54,399							893,652	4,774,297			893,652	4,774,297
Balance, December 31, 2005	3,866,769	16,974,908	192,147	1,800,000	2,000	19,010	5,244,902	25,214,988	—	—	9,305,818	44,008,906
Issuance of Series 05 preferred stock, net of issuance costs of $86,426 (unaudited)									2,920,000	17,433,574	2,920,000	17,433,574
Balance, June 30, 2006 (Unaudited)	3,866,769	$ 16,974,908	192,147	$ 1,800,000	2,000	$ 19,010	5,244,902	$ 25,214,988	2,920,000	$ 17,433,574	12,225,818	$ 61,442,480

9. Redeemable Convertible Preferred Stock (Continued)

The rights and preferences of the preferred stock at December 31, 2005 are as follows:

Dividends

The holders of outstanding preferred stock shall be entitled to receive, out of funds legally available, when and if declared by the Board of Directors, dividends at the same rate as dividends that are paid with respect to the common stock, treating each share of preferred stock as being equal to the number of shares of common stock into which each such share of preferred stock is then convertible.

Liquidation Preferences

In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company, the holders of preferred stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders before any payment shall be made to the holders of common stock or any other class or series of stock ranking on liquidation junior to the preferred stock by reason of their ownership thereof, an amount equal to:

(i) $1.14 per share of Series A preferred,

(ii) $1.60 per share of Series B preferred,

(iii) $2.40 per share of Series C preferred,

(iv) $4.60 per share of Series D preferred,

(v) $10.80 per share of Series E preferred,

(vi) $10.80 per share of Series F preferred,

(vii) $10.80 per share of Series G preferred,

(viii) $10.80 per share of Series H preferred,

(ix) $10.80 per share of Series I-1 preferred,

(x) $10.80 per share of Series J preferred,

(xi) $10.80 per share of Series J-1 preferred,

(xii) $5.40 per share of Series 04 preferred, and

(xiii) $5.40 per share of Series 04-1 preferred.

Each of the above shall be appropriately adjusted for stock splits, stock dividends, reclassifications, recapitalizations or other similar events affecting the preferred stock.

If upon any such liquidation, dissolution or winding-up of the Company the remaining assets of the Company available for distribution to its stockholders shall be insufficient to pay the holders of shares of preferred stock the full amount to which they shall be entitled, the assets of the Company shall be distributed as follows:

(i) ratably to the holders of shares of Series 04 preferred until the Series 04 preference is paid in full,

(ii) ratably to the holders of shares of 04-1 preferred, Series J preferred, Series J-1 preferred and Series I-1 preferred in proportion to the respective amounts which would otherwise be payable in respect to the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full, until the Series 04-1 preference, Series J preference, Series J-1 preference and Series I-1 preference are paid in full, and

(iii) then to the holders of shares of junior preferred and any class or series of stock ranking on liquidation on a parity with the junior preferred in proportion to the respective amounts which would otherwise be payable with respect to the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

After the payment of all preferential amounts required to be paid to the holders of preferred stock and any other class or series of stock of the Company ranking on liquidation senior to or on a parity with the preferred stock, upon the dissolution, liquidation or winding-up of the Company, the remaining net assets of the Company available for distribution shall be distributed ratably among the participating holders of Series 04 preferred, Series 04-1 preferred, Series J preferred, Series J-1 preferred, Series I-1 preferred and common stock.

Change in Control

A merger or consolidation of the Company, or the sale of all or substantially all the assets of the Company, shall be deemed to be a liquidation, dissolution or winding up of the Company, and the holders of preferred stock shall be paid the liquidation amount for their shares, but only if, in the case of a merger, after giving effect to such merger, the holders of the Company's securities immediately prior to such merger own 50% or less of any surviving entity's voting securities.

Voting

Each holder of outstanding shares of preferred stock shall be entitled to the number of votes equal to the number of whole shares of common stock into which the shares of preferred stock held by such holder are then convertible. Except as provided by law, by the provisions of the Certificate of Incorporation or by the provisions establishing any other series of preferred stock, holders of any outstanding series of preferred stock shall vote together with the holders of common stock as a single class on all actions to be taken by the stockholders of the Company.

In addition, the Certificate of Incorporation provides holders of certain series of preferred stock with additional voting rights and requires the Company to secure stockholder consent for certain actions as defined in the Certificate of Incorporation.

Conversion

The holders of the preferred stock shall have conversion rights as follows:

Right to Convert

Each share of preferred stock shall be convertible, at the option of the holder, at any time and from time to time, into such number of fully paid and nonassessable shares of common stock as is determined by dividing the Adjusted Purchase Price for the series of preferred stock being converted by the applicable Conversion Price in effect at the time of conversion. The Adjusted Purchase Price and the Conversion Price shall initially be equal to the liquidation preferences.

All shares of preferred stock then outstanding shall convert into shares of common stock at the then effective conversion rate at the closing of the sale of shares of common stock in a fully underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933.

Adjustment of Series J and Series 04 Conversion Price Upon Issuance of Common Stock

If the Company shall, at any time there are shares of Series J preferred and/or Series 04 preferred outstanding, issue or sell, any shares of common stock for a consideration per share less than the Conversion Price of such series of preferred stock in effect immediately prior to the time of such issue or sale, then, the Effective Conversion Price for such series of preferred stock shall be reduced to the price determined by dividing (i) an amount equal to the sum of (a) the number of shares of common stock outstanding or deemed outstanding, determined on a fully diluted basis assuming the exercise, conversion and exchange of all outstanding shares of Convertible Securities and Options immediately prior to such issue or sale multiplied by the then existing per share Effective Conversion Price for such series of preferred stock and (b) the consideration, if any, received by the Company upon such issue or

sale, by (ii) the total number of shares of common stock outstanding or deemed outstanding determined on a fully diluted basis assuming the exercise, conversion and exchange of all outstanding shares of Convertible Securities and Options immediately after such issue or sale.

Pay to Play

In the event that the Company issues any securities which would result in the reduction of the Effective Conversion Price of the Series J preferred and/or the Series 04 preferred (a "Dilutive Equity Financing"), the Company shall, after the initial closing of such Dilutive Equity Financing, provide notice to each holder of the Series J preferred and /or Series 04 preferred, that did not purchase its Participation Amount of the securities issued in such Dilutive Equity Financing (the "Pay to Play Notice"). If such holder does not purchase or agree to purchase its Participation Amount by the close of business on the 15th day after delivery of the Pay to Play Notice, then, as of such date, such holder shall be deemed to be a "Non-Participating holder" and all of the shares of the Series J preferred and/or Series 04 preferred owned by the Non-participating Holder shall automatically be converted into one share of a newly created series of preferred stock (Series J-1 or Series 04-1, as the case may be), which series shall be identical in all respects to the Series J or Series 04 preferred except that the Conversion Price of the newly created series of preferred stock shall be equal to the Effective Conversion Price of the Series J or Series 04 preferred immediately prior to the applicable Subsequent Dilutive Equity Financing and shall not be subject to further anti-dilution adjustments.

Redeemable Convertible Preferred Stock Issuances for 2003 through 2005 and for the period ended June 30, 2006 (unaudited)

In June 2003, the Company issued 270,704 shares of Series I preferred stock at $10.80 per share and warrants to purchase common stock for gross proceeds of $2,923,604.

In November 2003, the Company issued 324,074 shares of Series J redeemable convertible preferred stock at $10.80 per share and warrants to purchase common stock for gross proceeds of $3,499,999.

In November 2003, in conjunction with the issuance of Series J preferred stock, shareholders of 1,208,880 shares of Series I preferred stock exercised their right to exchange the shares of Series I preferred stock for 1,208,880 shares of Series J preferred stock.

In November 2003, shareholders of 192,147 shares of Series I preferred stock who elected not to participate in the Series J preferred stock offering had their 192,147 shares of Series I preferred stock converted into 192,147 shares of Series I-1 redeemable convertible preferred stock in accordance with the preferred stock provisions.

In January 2004, the Company issued an additional 57,370 shares of Series J preferred stock at $10.80 per share and warrants to purchase common stock for gross proceeds of $619,596.

In January 2004, in conjunction with the issuance of Series J preferred stock, the remaining shareholders of 36,918 shares of Series I preferred stock exercised their right to exchange the shares of Series I preferred stock for 36,918 shares of Series J preferred stock.

In April through August 2004, the Company issued 1,100,766 shares of Series 04 redeemable convertible preferred stock at $5.40 per share for gross proceeds of $5,944,136. In conjunction with the issuance of Series 04 preferred stock, shareholders of 1,625,242 shares of Series J preferred stock exercised their right to exchange the shares of Series J preferred stock for 3,250,484 shares of Series 04 preferred stock.

Shareholders of 2,000 shares of Series J preferred stock who elected not to participate in the Series 04 preferred stock offering had their 2,000 shares of Series J preferred stock converted into 2,000 shares of Series J-1 redeemable convertible preferred stock in accordance with the preferred stock provisions.

From March through May 2005, the Company issued 893,652 shares of Series 04 redeemable convertible preferred stock at $5.40 per share for gross proceeds of $4,825,721.

In January 2006, the Company issued 2,920,000 shares of Series 05 redeemable convertible preferred stock at $6.00 per share for gross proceeds of $17,520,000. The rights and preferences associated with this Series are similar to those rights of Series 04 redeemable convertible preferred stock. The Company also authorized 2,920,000 shares of Series 05-1 redeemable convertible preferred stock which has the rights similar to those of Series 04-1. The Company also cancelled Series H and Series J preferred stock during its first quarter ended March 31, 2006. There was no associated Series H or Series J preferred stock outstanding.

Warrants

In connection with the issuance of the Series H preferred stock during 2001, the Company issued warrants to purchase 132,446 shares of common stock at an exercise of $10.80 per share. The warrants expire five years from issuance date. The warrants were recorded at their relative fair value of $169,703 as a reduction to the carrying value of the Series H preferred stock and a corresponding increase to additional paid-in capital. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 90% volatility, risk-free interest rate of 5.13%, and a life of five years.

In connection with the issuance of Series I preferred stock during 2002, the Company issued warrants to purchase 637,461 shares of common stock at an exercise price of $10.80 per share; and concurrently, the Company issued warrants to purchase 529,780 shares of common stock at an exercise price of $10.80 per share in connection with the exchange of Series H preferred stock for Series I preferred stock. The warrants expire five years from issuance date. The warrants were recorded at their relative fair value of $1,553,389 as a reduction to the carrying value of the Series I preferred stock and a corresponding increase to additional paid-in capital. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 100% volatility, risk-free interest of 4.65%, and a life of five years.

In conjunction with the issuance of the Series I preferred stock during 2003, the Company issued warrants to purchase 270,704 shares of common stock at an exercise price of $10.80 per share. The warrants expire five years from issuance date. The warrants were recorded at their relative fair value of $149,405 as a reduction to the carrying value of the Series I preferred stock and a corresponding increase to additional paid-in capital. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 100% volatility, risk-free interest of 2.27%, and a life of five years.

In connection with the issuance of Series J preferred stock, the Company issued warrants to purchase 324,074 shares of common stock at an exercise price of $0.10 per share; and concurrently, the Company issued warrants to purchase 1,208,880 shares of common stock at an exercise price of $0.10 per share in connection with the exchange of Series I preferred stock for Series J preferred stock. The warrants expire five years from issuance date. In addition, the Company cancelled warrants to purchase 426,259 shares of common stock at an exercise price of $10.80 per share. The warrants issued were recorded at their relative fair value of $1,282,495 as a reduction to the carrying value of the Series J preferred and a corresponding increase to additional paid-in capital, net of the reversal of the canceled warrants. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 100% volatility, risk-free interest rate of 3.29%, and a life of five years.

In connection with the issuance of the Series J preferred stock during 2004, the Company issued warrants to purchase 57,370 shares of common stock at an exercise price of $0.10 per share; and concurrently, the Company issued warrants to purchase 36,918 shares of common stock at an exercise price of $0.10 per share in connection with the exchange of Series I preferred stock for Series J preferred stock. The warrants expire five years from issuance date. The warrants were recorded at their relative fair value of $107,870 as a reduction to the carrying value of the Series J preferred stock and a corresponding increase to additional paid-in capital. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 100% volatility, risk-free interest rate range of 3.12% - 3.29%, and a life of five years.

In connection with signing the lease agreement in 2004, the Company issued the landlord warrants to purchase 5,000 shares of common stock at an exercise price of $2.70 per share. The warrants expire ten years from the lease term commencement date. The fair value of the warrants was immaterial.

In conjunction with the issuance of Series 04 preferred stock in 2004 and the exchange of the shares of Series J preferred stock, 189,716 warrants to purchase common stock were cancelled resulting in a decrease of additional paid-in capital of $218,773.

During the six months ended June 30, 2006, 279,583 and 25,450 of the outstanding $0.10 and $10.80 warrants, respectively, were exercised (unaudited). Also, during the six months ended June 30, 2006, 106,996 warrants at $10.80 expired (unaudited).

10. Common Stock

Common Stock Issuances

In 1992, the Company issued 300,000 shares of common stock to initial investors at a price of $0.03 per share or total proceeds of $9,000.

In November 1993, the Company issued 1,200,000 shares of common stock to new and existing stockholders at a price of $0.025 per share or total proceeds of $30,000. Additionally, in November 1993, the Company issued 500,000 shares of Class A common stock to existing stockholders at a price of $0.20 per share or total proceeds of $100,000. The outstanding shares of Class A common stock were automatically converted into common stock upon issuance of a preferred series in 1994 and Class A common shares are no longer authorized by the Company.

11. Stock Compensation Plans

In 1995, the Company adopted a stock plan (the "1995 Plan"). The 1995 Plan provided for the granting of incentive stock options, nonqualified stock options, stock awards, and opportunities to make direct purchases of stock, to employees, officers, directors and consultants of the Company. In June 2005, the 1995 Plan was terminated, and the Company adopted a new plan (the "2005 Plan" and, together with the 1995 Plan, referred to as the "Plans"). No further grants or awards have been, or may be, made under the 1995 Plan. Options that are outstanding under the 1995 Stock Plan continue to be governed by the 1995 Stock Plan. The 2005 Plan provides for the granting of incentive stock options, nonqualified stock options, stock grants, and stock-based awards to employees, officers, directors and consultants of the Company. The number of shares of common stock authorized for issuance under the 2005 Plan is 2,250,000 shares plus the amount of shares, if any, that were subject to options under the 1995 Stock Plan at June 2, 2005, but which subsequently become unissued upon the cancellation, surrender or termination of such options. At December 31, 2005, there were 3,000 and 3,250 shares that were subject to outstanding options under the 1995 Plan and the 2005 Plan, respectively, which had been unissued as a result of termination.

Options granted under the Plans generally vest ratably over four years from the date of hire, or date of commencement of services with the Company for nonemployees, and generally expire ten years from the date of issuance.

A summary of the number of shares of common stock for which outstanding options were exercisable under each of the Plans follows:

	1995 Stock Plan		2005 Stock Plan	
	Number Exercisable	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
December 31, 2003	497,613	$ 2.55	—	$ —
December 31, 2004	631,550	2.51	—	—
December 31, 2005	788,925	3.10	363,121	1.39
June 30, 2006 (unaudited)	821,925	3.08	560,429	1.51

A summary of the activity related to the shares of common stock covered by outstanding options under each of the plans follows:

	1995 Stock Plan			2005 Stock Plan		
	Number of Shares	Exercise Price Per Share	Weighted Average Exercise Price	Number of Shares	Exercise Price Per Share	Weighted Average Exercise Price
Balance at December 31, 2002	599,425	$0.40 - $10.80	$ 3.30	—	$—	$ —
Granted	264,750	$2.70	2.70	—	—	—
Exercised	(19,750)	$0.40 - $2.70	1.08	—	—	—
Cancelled	(10,750)	$2.70	2.70	—	—	—
Balance at December 31, 2003	833,675	$1.15 - $10.80	3.17	—	—	—
Granted	109,500	$1.35	1.35	—	—	—
Exercised	—	—	—	—	—	—
Cancelled	(10,000)	$1.35 - $2.70	2.57	—	—	—
Balance at December 31, 2004	933,175	$1.15 - $10.80	2.97	—	—	—
Granted	—	—	—	1,570,610	$1.35 - $1.50	1.39
Exercised	(4,000)	$1.35 - $2.70	2.53	(1,125)	1.35	1.35
Cancelled	(3,000)	$1.35 - $2.70	2.03	(3,250)	1.35	1.35
Balance at December 31, 2005	926,175	$1.15 - $10.80	$ 2.97	1,566,235	$1.35 - $1.50	$ 1.39

The weighted average fair value per share of options granted during fiscal years 2003, 2004 and 2005 was approximately $1.15, $0.44 and $0.27, respectively.

11. Stock Compensation Plans (Continued)

A summary of information about the shares of common stock covered by outstanding and exercisable options under the option plans at December 31, 2005 follows:

	Outstanding			Exercisable	
Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
$1.15	49,000	1.52	$ 1.15	49,000	$ 1.15
$1.35	1,275,500	9.51	$ 1.35	326,062	$ 1.35
$1.50	397,235	9.96	$ 1.50	93,809	$ 1.50
$2.70	712,675	5.57	$ 2.70	625,175	$ 2.70
$10.80	58,000	4.06	$ 10.80	58,000	$ 10.80
$1.15 - 10.80	2,492,410	8.17	$ 1.98	1,152,046	$ 2.56

At December 31, 2005, 685,640 shares were available for future option grants, stock grants, and stock-based awards under the 2005 Plan.

In December 2005, 397,235 options were granted to an officer of the Company of which 154,000 contain performance based vesting conditions. These options were issued at an exercise price of $1.50 which was below their fair market value of $1.56 at the time of grant and the related compensation expense was immaterial for the period ended December 31, 2005. The 154,000 options are a variable award and are subject to remeasurement which could result in the recording of compensation expense in the future, depending on the probability of achieving certain performance conditions. All other option grants awards during 2003, 2004 and 2005 were issued at an exercise price equal to the fair market value on the date of issuance.

During the six months ended June 30, 2006, 51,333 of the 154,000 variable options granted to the officer of the Company during 2005 were cancelled due to the term expiration; 51,333 of these variable options were determined to be highly probable for meeting the performance condition and as a result $95,289 in compensation expense and $43,313 in deferred compensation was recorded during the period (unaudited).

During 2005 and through June 30, 2006 (unaudited), the Company granted the following options to employees and nonemployees:

Grants Made During Quarter Ended	Number of Options Granted	Weighted-Average Exercise Price	Weighted-Average Fair Value per Share	Weighted-Average Intrinsic Value per Share
6/30/2006 (unaudited)	364,000	$ 3.65	$ 3.65	$ —
3/31/2006 (unaudited)	21,500	$ 1.50	$ 1.56	$ 0.06
12/31/2005	397,235	$ 1.50	$ 1.56	$ 0.06
9/30/2005	798,000	$ 1.35	$ 1.35	$ —
6/30/2005	375,375	$ 1.35	$ 1.35	$ —
3/31/2005	—	$ —	$ —	$ —

During 2003, 2004, 2005 and the six months ended June 30, 2006, the Company granted stock options to purchase 92,250, 22,000, 72,875 and 52,500 (unaudited) shares of common stock, respectively, to nonemployees. The compensation expense related to these options is recognized over a period of four years. The 2005 and 2006 grants vest quarterly and the 2003 and 2004 grants vest on an annual basis and such vesting is contingent upon future services provided by the consultants to the Company. Relating to these options, the Company recorded stock based compensation expense of $123,554, $48,922, $27,022 and $163,756 (unaudited) during 2003, 2004, 2005 and the six months ended June 30, 2006, respectively. Options remaining unvested for the nonemployee are subject to remeasurement each reporting period prior to vesting in full. Since the fair market value of the options issued to the nonemployee is subject to change in the future, the compensation expense recognized in each year may not be indicative of future compensation charges.

The fair value of each option granted to non-employees was estimated using the Black-Scholes option pricing model with the following assumptions:

Dividend yield	—
Volatility	75 - 100%
Risk-free interest rate	3.94 - 5.15%
Option term	10 years

Stock Options under SFAS No. 123(R) for the period ended June 30, 2006 (unaudited)

A summary of stock option activity under the Plans for the six months ended June 30, 2006 (unaudited) is presented below:

	1995 Stock Plan			2005 Stock Plan		
	Number of Shares	Exercise Price Per Share	Weighted Average Exercise Price	Number of Shares	Exercise Price Per Share	Weighted Average Exercise Price
Balance at December 31, 2005	926,175	$1.15 - $10.80	$ 2.97	1,566,235	$1.35 - $1.50	$ 1.39
Granted	—	—	—	385,500	$1.50 - $4.20	3.53
Exercised	(9,750)	$1.35 - $2.70	2.42	(4,031)	$1.35	1.35
Cancelled	(2,750)	$1.35 - $2.70	1.72	(65,302)	$1.35 - $1.50	1.48
Balance at June 30, 2006	913,675	$1.15 - $10.80	2.98	1,882,402	$1.35 - $4.20	1.82

A summary of information about the shares of common stock covered by outstanding and exercisable options under the option plans at June 30, 2006 (unaudited) follows:

		Outstanding			Exercisable	
Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price		Number of Shares	Weighted Average Exercise Price
$1.15	49,000	1.02	$ 1.15		49,000	$ 1.15
$1.35	1,258,500	9.02	$ 1.35		472,593	$ 1.35
$1.50	362,402	9.47	$ 1.50		120,180	$ 1.50
$2.70	704,175	5.06	$ 2.70		653,675	$ 2.70
$2.75	137,500	9.81	$ 2.75		8,906	$ 2.75
$4.20	226,500	9.96	$ 4.20		20,000	$ 4.20
$10.80	58,000	3.57	$ 10.80		58,000	$ 10.80
$1.15 - 10.80	2,796,077	7.94	$ 2.20		1,382,354	$ 2.44

At June 30, 2006 the aggregate intrinsic value of outstanding and exercisable options was $5,970,249 and $2,814,204, respectively (unaudited). At June 30, 2006 the weighted average contractual remaining life of exercisable options was 6.60 years.

The weighted average fair value of stock options granted during the six months ended June 30, 2006 was $2.71 (unaudited).

As of June 30, 2006, the total compensation cost related to nonvested options not yet recognized in the financial statements is approximately $728,911 (unaudited) and the weighted average period over which it is expected to be recognized is 3.74 years (unaudited).

12. Income Taxes

There is no provision for income taxes because the Company has incurred operating losses since inception. The reported amount of income tax expense for the years differs from the amount that would result from applying domestic federal statutory tax rates to pretax losses primarily because of changes in valuation allowance. Significant components of the Company's net deferred tax asset at December 31, 2003, 2004 and 2005 are as follows:

	2003	2004	2005
Net operating loss carryforwards	$ 8,301,389	$ 9,136,063	$ 9,905,024
Capitalization of research and development expenses	3,798,657	3,572,974	4,670,977
Credit carryforwards	1,343,156	1,431,308	1,736,233
Other temporary differences	2,453,955	3,664,049	4,802,220
Total deferred tax assets	15,897,157	17,804,394	21,114,454
Valuation allowance	(15,897,157)	(17,804,394)	(21,114,454)
Net deferred tax asset	$ —	$ —	$ —

At December 31, 2005, the Company had net operating loss carryforwards for federal and state income tax purposes of approximately $26,033,000 and $16,807,000, respectively. The Company's federal and state net operating loss carryforwards will begin to expire in 2008 and 2006, respectively. The Company also has available research and development credits for federal and state income tax purposes of approximately $1,075,000 and $888,000, respectively. The federal and state research and development credit will begin to expire in 2012. The Company also has available investment tax credits for state income tax purposes of approximately $114,000, which began to expire in 2005. However, changes in the Company's ownership, as defined in the Internal Revenue Code, may limit the Company's ability to utilize the net operating loss and tax credit carryforwards.

Management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which are comprised principally of net operating loss carryforwards and research and development credits. Under the applicable accounting standards, management has considered the Company's history of losses and concluded that it is more likely than not that the Company will not recognize the benefits of federal and state deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets.

Utilization of the net operating losses and credits may be subject to a substantial annual limitation due to ownership change limitations provided by the Internal Revenue Code of 1986, as well as similar state and foreign provisions. These ownership changes may limit the amount of net operating loss and credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. Subsequent ownership changes could further affect the limitation in future years. These annual limitation provisions may result in the expiration of certain net operating losses and credits before utilization.

13. Employee Benefits

The Company established a 401(k) savings plan in 1995, in which substantially all of its permanent employees are eligible to participate. Participants may contribute up to $14,000 of their annual compensation to the plan in 2005, subject to certain limitations. The Company has not made any contribution from inception to December 31, 2005.

14. Subsequent Events

On July 12, 2006, ADM exercised its option under the Technology Alliance and Option Agreement and entered into the Commercial Alliance Agreement with the Company at which time the Technology Alliance and Option Agreement terminated pursuant to its terms.

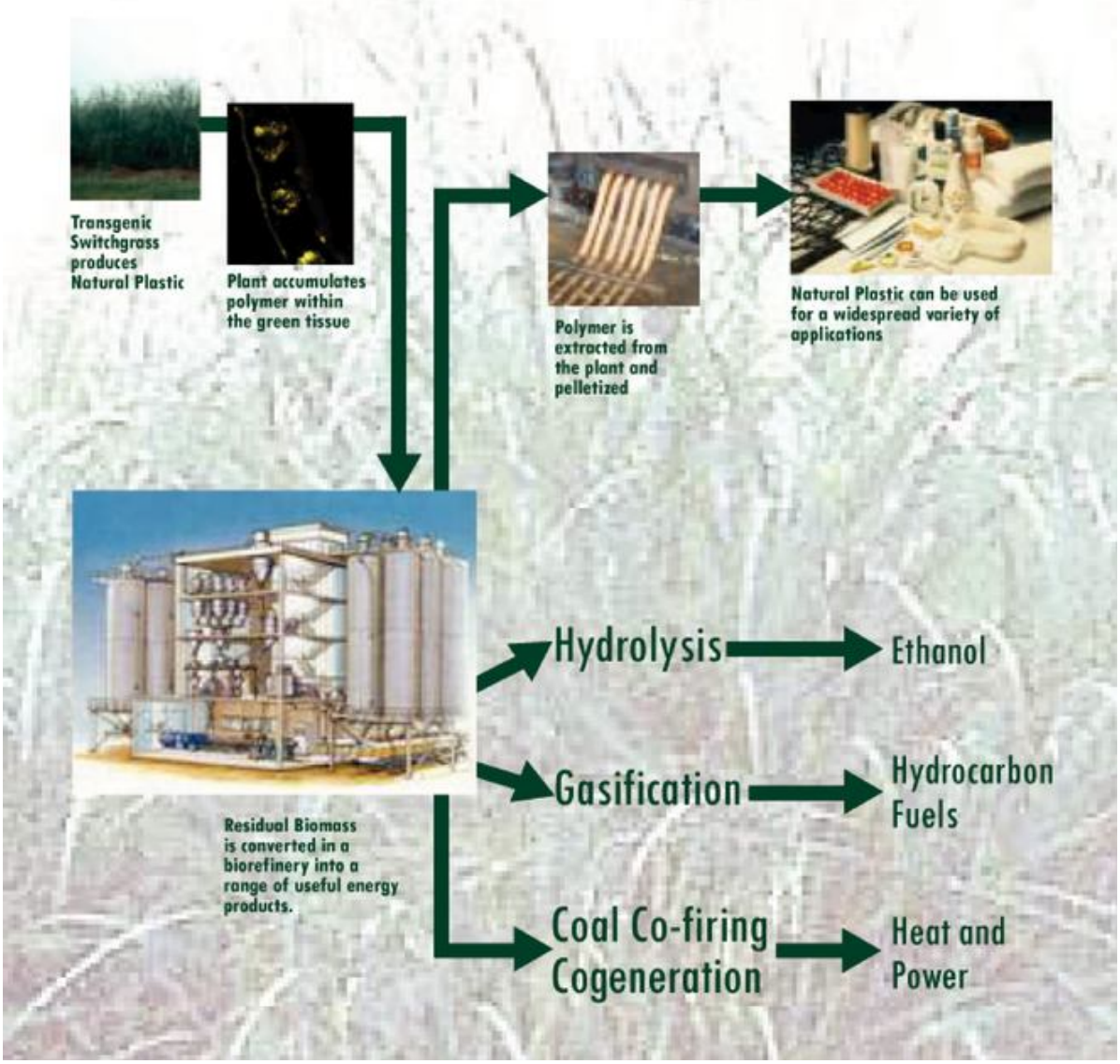
On July 14, 2006, the Company filed its initial public offering S-1 registration statement.

On July 25, 2006, the Company received the first two quarterly payments due from ADM under the Commercial Alliance Agreement totaling $3.15 million.

METABOLIX
where nature performs™

Metabolix Switchgrass Biorefinery Program

Renewable PHA Natural Plasic producing Switchgrass can potentially supply abundant amounts of biodegradable plastic as well as biomass for conversion to ethanol, other fuels or heat and power.



Shares

METABOLIX, INC.

Common Stock

PROSPECTUS

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

Through and including , 2006 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Piper Jaffray

Jefferies & Company **Thomas Weisel Partners LLC**

Ardour Capital Investments, LLC

, 2006

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

	Amount
Securities and Exchange Commission registration fee	$ 9,228.75
NASD registration fee	9,125
NASDAQ listing application fee	5,000
Blue sky fees and expenses	*
Transfer agent and registrar fee	*
Printing and engraving expenses	*
Accountant fees and expenses	*
Legal fees and expenses	*
Miscellaneous	*
Total	*

* To be provided by amendment.

Item 14. Indemnification of Directors and Officers.

Section 145(a) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or other adjudicating court shall deem proper.

Section 145(g) of the Delaware General Corporation Law provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the Delaware General Corporation Law.

Article VII of our amended and restated certificate of incorporation (the "Charter"), provides that no director of our company shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to us or our stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) in respect of unlawful dividend payments or stock redemptions or repurchases, or (4) for any transaction from which the director derived an improper personal benefit. In addition, our Charter provides that if the Delaware General Corporation Law is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of our company shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

Article VII of the Charter further provides that any repeal or modification of such article by our stockholders or an amendment to the Delaware General Corporation Law will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a director serving at the time of such repeal or modification.

Article V of our amended and restated by-laws (the "By-Laws"), provides that we will indemnify each of our directors and officers and, in the discretion of our board of directors, certain employees, to the fullest extent permitted by the Delaware General Corporation Law as the same may be amended (except that in the case of an amendment, only to the extent that the amendment permits us to provide broader indemnification rights than the Delaware General Corporation Law permitted us to provide prior to the amendment) against any and all expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by the director, officer or such employee or on the director's, officer's or employee's behalf in connection with any threatened, pending or completed proceeding or any claim, issue or matter therein, to which he or she is or is threatened to be made a party because he or she is or was serving as a director, officer or employee of our company, or at our request as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of our company and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. Article V of the By-Laws further provides for the advancement of expenses to each of our directors and, in the discretion of the board of directors, to certain officers and employees.

In addition, Article V of the By-Laws provides that the right of each of our directors and officers to indemnification and advancement of expenses shall be a contract right and shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the Charter or By-Laws, agreement, vote of stockholders or otherwise. Furthermore, Article V of the By-Laws authorizes us to provide insurance for our directors, officers and employees, against any liability, whether or not we would have the power to indemnify such person against such liability under the Delaware General Corporation Law or the provisions of Article V of the By-Laws.

In connection with the sale of common stock being registered hereby, we intend to enter into indemnification agreements with each of our directors and our executive officers. These agreements will provide that we will indemnify each of our directors and such officers to the fullest extent permitted by law and the Charter and By-Laws.

We also intend to obtain a general liability insurance policy which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act of 1933, as amended, against certain liabilities.

Item 15. Recent Sales of Unregistered Securities.

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act:

(a) Issuances of Capital Stock

In June 2003, we issued and sold an aggregate of 270,704 shares of Series I convertible preferred stock to 20 investors for an aggregate purchase price of $2,923,603.

In November 2003, we issued and sold an aggregate of 324,074 shares of Series J convertible preferred stock to 19 investors for an aggregate purchase price of $3,499,999.

In November 2003, in conjunction with the issuance of Series J convertible preferred stock, shareholders of 1,208,880 shares of Series I convertible preferred stock exercised their right to exchange their shares of Series I convertible preferred stock for 1,208,880 shares of Series J convertible preferred stock.

In November 2003, shareholders of 192,147 shares of Series I convertible preferred stock not participating in the Series J convertible preferred stock offering had their 192,147 shares of Series I convertible preferred stock converted into 192,147 shares of Series I-1 redeemable convertible preferred stock in accordance with the preferred stock provisions.

In January 2004, we issued and sold an aggregate of 57,370 shares of Series J convertible preferred stock to 15 investors for an aggregate purchase price of $619,596.

In January 2004, in conjunction with the issuance of Series J convertible preferred stock, shareholders of 36,918 shares of Series I convertible preferred stock exercised their right to exchange their shares of Series I convertible preferred stock for 36,918 shares of Series J convertible preferred stock.

In April through August 2004, we issued and sold an aggregate of 1,100,766 shares of Series 04 convertible preferred stock to 39 investors for an aggregate purchase price of $5,944,136. In conjunction with the issuance of Series 04 convertible preferred stock, shareholders of 1,625,242 shares of Series J convertible preferred stock exercised their right to exchange the shares of Series J convertible preferred stock for 3,250,484 shares of Series 04 convertible preferred stock.

Shareholders of 2,000 shares of Series J convertible preferred stock not participating in the Series 04 preferred stock offering had their 2,000 shares of Series J convertible preferred stock converted into 2,000 shares of Series J-1 redeemable convertible preferred stock in accordance with the preferred stock provisions.

From March through May 2005, we issued and sold an aggregate of 893,652 shares of Series 04 convertible preferred stock to 29 investors for an aggregate purchase price of $4,825,721.

In January 2006, we issued 2,920,000 shares of Series 05 convertible preferred stock at $6.00 per share.

ADM has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the initial public offering price. The sale of shares to ADM will not be registered in this offering.

No underwriters were used in the foregoing transactions. All sales of securities described above were made in reliance upon the exemption from registration provided by Section 4(2) of the Securities Act (and/or Regulation D promulgated thereunder) for transactions by an issuer not involving a public offering. All of the foregoing securities are deemed restricted securities for the purposes of the Securities Act.

(b) Grants and Exercises of Stock Options.

From May 1, 2003 to June 30, 2006, we granted stock options to purchase an aggregate of 2,165,860 shares of our common stock, with exercise prices ranging from $2.70 to $4.20 per share, to employees, directors and consultants pursuant to our stock option plans. Since May 1, 2003, we issued and sold an aggregate of 18,906 shares of our common stock upon exercise of stock options granted pursuant to our stock plans for an aggregate consideration of $2,194. The issuance of common stock upon exercise of the options were exempt either pursuant to Rule 701, as a transaction pursuant to a compensatory benefit plan, or pursuant to Section 4(2), as a transaction by an issuer not involving a public offering. The common stock issued upon exercise of options and in connection with awards of restricted stock are deemed restricted securities for the purposes of the Securities Act.

(c) Issuance of Warrants.

In conjunction with the issuance of the Series I preferred stock during 2003, the Company issued warrants to purchase 270,704 shares of common stock at an exercise price of $10.80 per share.

In connection with the issuance of Series J preferred stock, the Company issued warrants to purchase 324,074 shares of common stock at an exercise price of $0.10 per share; and concurrently, the Company issued warrants to purchase 1,208,880 shares of common stock at an exercise price of $0.10 per share in connection with the exchange of Series I preferred stock for Series J preferred stock. The warrants expire five years from issuance date. In addition, the Company canceled warrants to purchase 426,259 shares of common stock at an exercise price of $10.80 per share.

In connection with the issuance of the Series J preferred stock during 2004, the Company issued warrants to purchase 57,370 shares of common stock at an exercise price of $0.10 per share; and concurrently, the Company issued warrants to purchase 36,918 shares of common stock at an exercise price of $0.10 per share in connection with the exchange of Series I preferred stock for Series J preferred stock.

In connection with signing the lease agreement in 2004, the Company issued the landlord warrants to purchase 5,000 shares of common stock at an exercise price of $2.70 per share.

During 2004, the Company canceled warrants to purchase 189,716 shares of common stock at an exercise price of $0.10 per share. The cancellation resulted in a decrease of additional paid-in capital of $218,774.

This issuance was made in reliance upon the exemption from registration provided by Section 4(2) of the Securities Act (and/or Regulation D promulgated thereunder) for transactions by an issuer not involving a public offering. The common stock issued upon exercise of the warrant are deemed restricted securities for the purposes of the Securities Act.

Item 16. Exhibits and Financial Statement Schedules.

(a) See the Exhibit Index on the page immediately preceding the exhibits for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

(b) Financial Statement Schedules

None.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriter at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and this offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Massachusetts, on this 31st day of August, 2006.

METABOLIX, INC.

By: /s/ JAMES J. BARBER

Name: James J. Barber
Title: President, Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

/s/ JAMES J. BARBER James J. Barber	President, Chief Executive Officer, and Director (Principal Executive Officer)	August 31, 2006
* Dr. Oliver P. Peoples	Chief Scientific Officer, Vice President Research and Director	August 31, 2006
/s/ THOMAS G. AUCHINCLOSS, JR. Thomas G. Auchincloss, Jr.	Vice President and Chief Financial Officer (Principal Financial Officer)	August 31, 2006
/s/ ANINDA KATRAGADDA Aninda Katragadda	Director of Finance and Corporate Controller (Principal Accounting Officer)	August 31, 2006
* Edward M. Muller	Chairman of the Board, Director	August 31, 2006
* Edward M. Giles	Director	August 31, 2006
* Dr. Jay Kouba	Director	August 31, 2006
* Jack W. Lasersohn	Director	August 31, 2006
* Dr. Anthony J. Sinskey	Director	August 31, 2006
* Dr. Simon F. Williams	Director	August 31, 2006

*By: /s/ JAMES J. BARBER

James J. Barber
Attorney-in-fact

EXHIBIT INDEX

Number	Description
1.1*	Form of Underwriting Agreement
3.1*	Form of Amended and Restated Certificate of Incorporation of the Registrant
3.2*	Form of Second Amended and Restated Certificate of Incorporation of the Registrant (to be effective upon the completion of this offering)
3.3/*\	Amended and Restated By-laws of the Registrant
4.1*	Specimen Stock Certificate for shares of the Registrant's Common Stock
4.2/*\	Form of Common Stock Purchase Warrant issued in each of the Series I Financing, the Series J Financing and the Series 04 financing
5.1*	Opinion of Goodwin Procter LLP
10.1†/*\	1995 Stock Plan
10.1.1†/*\	1995 Stock Plan, Form of Incentive Stock Option Agreement
10.1.2†/*\	1995 Stock Plan, Form of Non-Qualified Stock Option Agreement
10.2†/*\	2005 Stock Plan
10.2.1†/*\	2005 Stock Plan, Form of Incentive Stock Option Agreement
10.2.2†/*\	2005 Stock Plan, Form of Non-Qualified Stock Option Agreement
10.3†*	2006 Stock Option and Incentive Plan
10.3.1†*	2006 Stock Option and Incentive Plan, Form of Incentive Stock Option Agreement
10.3.2†*	2006 Stock Option and Incentive Plan, Form of Non-Qualified Stock Option Agreement
10.4#**	License Agreement between the Registrant and Massachusetts Institute of Technology dated July 15, 1993, as amended
10.5#**	Commercial Alliance Agreement by and among the Registrant, ADM/Metabolix Sales Company, LLC and ADM Polymer Corporation dated July 12, 2006
10.6#**	Operating Agreement of ADM/Metabolix Sales Company, LLC by and between the Registrant and ADM Polymer Corporation dated July 12, 2006
10.7**	Letter Agreement by and between the Registrant and Archer Daniels Midland Company dated November 3, 2004.
10.8†*	Employment Agreement by and between the Registrant and James J. Barber dated December 14, 2005
10.9†*	Employment Agreement by and between the Registrant and Thomas G. Auchincloss dated January 10, 2006
10.10†*	Employment Agreement by and between the Registrant and Johan van Walsem dated May 1, 2006
10.11†*	Employment Agreement by and between the Registrant and Robert Findlen dated May 24, 2006.
10.12†*	Form of Employee Noncompetition, Nondisclosure and Inventions Agreement with James J. Barber and Johan van Walsem.

10.13†*	Form of Noncompetition, Nondisclosure and Inventions Agreement with Mr. Auchincloss, Dr. Peoples and Mr. Findlen.
10.14†*	Form of Indemnification Agreement
10.15/*\	Lease Agreement by and between the Registrant and 21 Erie Realty Trust dated as of December 29, 2003 for the premises located at 21 Erie Street, Cambridge, Massachusetts 02139
10.16/*\	Fifth Amended and Restated Stockholders Agreement by and among the Registrant and certain of its stockholders dated January 19, 2006.
10.17**	Amendment No. 1 to Fifth Amended and Restated Stockholders Agreement by and among the Registrant and certain of its stockholders dated July 12, 2006
10.18**	Stock Purchase Agreement between the Registrant and Archer Daniels Midland Company dated July 12, 2006
10.19#/*\	License Agreement by and between the Registrant and Tepha, Inc. dated as of October 1, 1999.
10.20#/*\	License Agreement by and between the Registrant and Tepha, Inc. dated as of September 9, 2003.
10.21#/*\	Technology Alliance and Option Agreement by and between the Registrant and ADM Polymer Corporation dated as of November 4, 2004.
10.22#/*\	First Amendment to Technology Alliance and Option Agreement by and between the Registrant and ADM Polymer Corporation dated as of September 8, 2005.
23.1*	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
23.2/*\	Consent of PricewaterhouseCoopers LLP
24.1**	Power of Attorney (included in page II-7)

† Indicates a management contract or any compensatory plan, contract or arrangement.

* To be filed by amendment.

** Previously filed.

/*\ Filed herewith.

Confidential treatment requested for portions of this document.

QuickLinks

Exhibit 3.3

AMENDED AND RESTATED

BY-LAWS

OF

METABOLIX, INC.

(the "Corporation")

ARTICLE I

STOCKHOLDERS

SECTION 1. ANNUAL MEETING. The annual meeting of stockholders (any such meeting being referred to in these By-laws as an "Annual Meeting") shall be held at the hour, date and place within or without the United States which is fixed by the Board of Directors, which time, date and place may subsequently be changed at any time by vote of the Board of Directors. If no Annual Meeting has been held for a period of thirteen months after the Corporation's last Annual Meeting, a special meeting in lieu thereof may be held, and such special meeting shall have, for the purposes of these By-laws or otherwise, all the force and effect of an Annual Meeting. Any and all references hereafter in these By-laws to an Annual Meeting or Annual Meetings also shall be deemed to refer to any special meeting(s) in lieu thereof.

SECTION 2. NOTICE OF STOCKHOLDER BUSINESS AND NOMINATIONS.

(a) Annual Meetings of Stockholders.

(1) Nominations of persons for election to the Board of Directors of the Corporation and the proposal of business to be considered by the stockholders may be made at an Annual Meeting (a) pursuant to the Corporation's notice of meeting, (b) by or at the direction of the Board of Directors or (c) by any stockholder of the Corporation who was a stockholder of record at the time of giving of notice provided for in this By-law, who is entitled to vote at the meeting, who is present (in person or by proxy) at the meeting and who complies with the notice procedures set forth in this By-law. In addition to the other requirements set forth in this By-law, for any proposal of business to be considered at an Annual Meeting, it must be a proper subject for action by stockholders of the Corporation under Delaware law.

(2) For nominations or other business to be properly brought before an Annual Meeting by a stockholder pursuant to clause (c) of paragraph (a)(1) of this By-law, the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation. To be timely, a stockholder's notice shall be delivered to the Secretary at the principal executive offices of the Corporation not later than the close of business on

the 90th day nor earlier than the close of business on the 120th day prior to the first anniversary of the preceding year's Annual Meeting; provided, however, that in the event that the date of the Annual Meeting is advanced by more than 30 days before or delayed by more than 60 days after such anniversary date, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the 120th day prior to such Annual Meeting and not later than the close of business on the later of the 90th day prior to such Annual Meeting or the 10th day following the day on which public announcement of the date of such meeting is first made. Notwithstanding anything to the contrary provided herein, for the first Annual Meeting following the initial public offering of common stock of the Corporation, a stockholder's notice shall be timely if delivered to the Secretary at the principal executive offices of the Corporation not later than the close of business on the later of the 90th day prior to the scheduled date of such Annual Meeting or the 10th day following the day on which public announcement of the date of such Annual Meeting is first made or sent by the Corporation. Such stockholder's notice shall set forth (a) as to each person whom the stockholder proposes to nominate for election or reelection as a director, all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "Exchange Act") (including such person's written consent to

being named in the proxy statement as a nominee and to serving as a director if elected); (b) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made, and the names and addresses of other stockholders known by the stockholder proposing such business to support such proposal, and the class and number of shares of the Corporation's capital stock beneficially owned by such other stockholders; and (c) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (i) the name and address of such stockholder, as they appear on the Corporation's books, and of such beneficial owner, and (ii) the class and number of shares of the Corporation which are owned beneficially and of record by such stockholder and such beneficial owner.

(3) Notwithstanding anything in the second sentence of paragraph (a)(2) of this By-law to the contrary, in the event that the number of directors to be elected to the Board of Directors of the Corporation is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the Corporation at least 85 days prior to the first anniversary of the preceding year's Annual Meeting, a stockholder's notice required by this By-law shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to the Secretary at the principal executive offices of the Corporation not later than the close of business on the 10th day following the day on which such public announcement is first made by the Corporation.

(b) GENERAL.

(1) Only such persons who are nominated in accordance with the provisions of this By-law shall be eligible for election and to serve as directors and only such business shall be conducted at an Annual Meeting as shall have been brought before the meeting in accordance with the provisions of this By-law. The Board of Directors or a designated committee thereof shall have the power to determine whether a nomination or any business proposed to be brought before the meeting was made in accordance with the provisions of this By-law. If neither the Board of Directors nor such designated committee makes a determination as to whether any stockholder proposal or nomination was made in accordance with the provisions of this By-law, the presiding officer of the Annual Meeting shall have the power and duty to determine whether the stockholder proposal or nomination was made in accordance with the provisions of this By-law. If the Board of Directors or a designated committee thereof or the presiding officer, as applicable, determines that any stockholder proposal or nomination was not made in accordance with the provisions of this By-law, such proposal or nomination shall be disregarded and shall not be presented for action at the Annual Meeting.

(2) For purposes of this By-law, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act.

(3) Notwithstanding the foregoing provisions of this By-law, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this By-law. Nothing in this By-law shall be deemed to affect any rights of (i) stockholders to request inclusion of proposals in the Corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act or (ii) the holders of any series of Undesignated Preferred Stock to elect directors under specified circumstances.

SECTION 3. SPECIAL MEETINGS. Except as otherwise required by statute and subject to the rights, if any, of the holders of any series of Undesignated Preferred Stock, special meetings of the stockholders of the Corporation may be called only by the Board of Directors acting pursuant to a resolution approved by the affirmative vote of a majority of the Directors then in office. Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders of the Corporation.

SECTION 4. NOTICE OF MEETINGS; ADJOURNMENTS. A notice of each Annual Meeting stating the hour, date and place, if any, of such Annual Meeting shall be given not less than ten (10) days nor more than sixty (60) days before the Annual Meeting, to each stockholder entitled to vote thereat by delivering such notice to such stockholder or by mailing it, postage prepaid, addressed to such

stockholder at the address of such stockholder as it appears on the Corporation's stock transfer books.

Notice of all special meetings of stockholders shall be given in the same manner as provided for Annual Meetings, except that the notice of all special meetings shall state the purpose or purposes for which the meeting has been called.

Notice of an Annual Meeting or special meeting of stockholders need not be given to a stockholder if a waiver of notice is executed before or after such meeting by such stockholder or if such stockholder attends such meeting, unless such attendance was for the express purpose of objecting at the beginning of the meeting to the transaction of any business because the meeting was not lawfully called or convened.

The Board of Directors may postpone and reschedule any previously scheduled Annual Meeting or special meeting of stockholders and any record date with respect thereto, regardless of whether any notice or public disclosure with respect to any such meeting has been sent or made pursuant to Section 2 of this Article I of these By-laws or otherwise. In no event shall the public announcement of an adjournment, postponement or rescheduling of any previously scheduled meeting of stockholders commence a new time period for the giving of a stockholder's notice under Section 2 of this Article I of these By-laws.

When any meeting is convened, the presiding officer may adjourn the meeting if (a) no quorum is present for the transaction of business, (b) the Board of Directors determines that adjournment is necessary or appropriate to enable the stockholders to consider fully information which the Board of Directors determines has not been made sufficiently or timely available to stockholders, or (c) the Board of Directors determines that adjournment is otherwise in the best interests of the Corporation. When any Annual Meeting or special meeting of stockholders is adjourned to another hour, date or place, notice need not be given of the adjourned meeting other than an announcement at the meeting at which the adjournment is taken of the hour, date and place, if any, to which the meeting is adjourned and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting; provided, however, that if the adjournment is for more than 30 days, or if after the adjournment a new record date is fixed for the adjourned meeting, notice of the adjourned meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting shall be given to each stockholder of record entitled to vote thereat and each stockholder who, by law or under the Certificate of Incorporation of the Corporation (as the same may hereafter be amended and/or restated, the "Certificate") or these By-laws, is entitled to such notice.

SECTION 5. QUORUM. A majority of the shares entitled to vote, present in person or represented by proxy, shall constitute a quorum at any meeting of stockholders. If less than a quorum is present at a meeting, the holders of voting stock representing a majority of the voting power present at the meeting or the presiding officer may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice, except as provided in Section 5 of this Article I. At such adjourned meeting at which a quorum is present, any business may be transacted which might have been transacted at the meeting as originally noticed. The stockholders present at a duly constituted meeting may continue to transact business until

adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

SECTION 6. VOTING AND PROXIES. Stockholders shall have one vote for each share of stock entitled to vote owned by them of record according to the stock ledger of the Corporation, unless otherwise provided by law or by the Certificate. Stockholders may vote either (i) in person, (ii) by written proxy or (iii) by a transmission permitted by Section 212(c) of the Delaware General Corporation Law ("DGCL"). Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission permitted by Section 212(c) of the DGCL may be substituted for or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission. Proxies shall be filed in accordance with the procedures established for the meeting of stockholders. Except as otherwise limited therein or as otherwise provided by law, proxies authorizing a person to vote at a specific meeting shall entitle the persons authorized thereby to vote

at any adjournment of such meeting, but they shall not be valid after final adjournment of such meeting. A proxy with respect to stock held in the name of two or more persons shall be valid if executed by or on behalf of any one of them unless at or prior to the exercise of the proxy the Corporation receives a specific written notice to the contrary from any one of them.

SECTION 7. ACTION AT MEETING. When a quorum is present at any meeting of stockholders, any matter before any such meeting (other than an election of a director or directors) shall be decided by a majority of the votes properly cast for and against such matter, except where a larger vote is required by law, by the Certificate or by these By-laws. Any election of directors by stockholders shall be determined by a plurality of the votes properly cast on the election of directors. The Corporation shall not directly or indirectly vote any shares of its own stock; provided, however, that the Corporation may vote shares which it holds in a fiduciary capacity to the extent permitted by law.

SECTION 8. STOCKHOLDER LISTS. The Secretary or an Assistant Secretary (or the Corporation's transfer agent or other person authorized by these By-laws or by law) shall prepare and make, at least 10 days before every Annual Meeting or special meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for a period of at least ten (10) days prior to the meeting in the manner provided by law. The list shall also be open to the examination of any stockholder during the whole time of the meeting as provided by law.

SECTION 9. PRESIDING OFFICER. The Chairman of the Board, if one is elected, or if not elected or in his or her absence, the President, shall preside at all Annual Meetings or special meetings of stockholders and shall have the power, among other things, to adjourn such meeting at any time and from time to time, subject to Sections 5 and 6 of this Article I. The order of

business and all other matters of procedure at any meeting of the stockholders shall be determined by the presiding officer.

SECTION 10. INSPECTORS OF ELECTIONS. The Corporation shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the presiding officer shall appoint one or more inspectors to act at the meeting. Any inspector may, but need not, be an officer, employee or agent of the Corporation. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspectors shall perform such duties as are required by the DGCL, including the counting of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors. The presiding officer may review all determinations made by the inspectors, and in so doing the presiding officer shall be entitled to exercise his or her sole judgment and discretion and he or she shall not be bound by any determinations made by the inspectors. All determinations by the inspectors and, if applicable, the presiding officer, shall be subject to further review by any court of competent jurisdiction.

ARTICLE II

DIRECTORS

SECTION 1. POWERS. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors except as otherwise provided by the Certificate or required by law.

SECTION 2. NUMBER AND TERMS. The number of directors of the Corporation shall be fixed solely and exclusively by resolution duly adopted from time to time by the Board of Directors. The directors shall hold office in the manner provided in the Certificate.

SECTION 3. QUALIFICATION. No director need be a stockholder of the Corporation.

SECTION 4. VACANCIES. Vacancies in the Board of Directors shall be filled in the manner provided in the Certificate.

SECTION 5. REMOVAL. Directors may be removed from office in the manner provided in the Certificate.

SECTION 6. RESIGNATION. A director may resign at any time by giving written notice to the Chairman of the Board, if one is elected, the President or the Secretary. A resignation shall be effective upon receipt, unless the resignation otherwise provides.

SECTION 7. REGULAR MEETINGS. The regular annual meeting of the Board of Directors shall be held, without notice other than this Section 7, on the same date and at the same place as the Annual Meeting following the close of such meeting of stockholders. Other regular meetings of the Board of Directors may be held at such hour, date and place as the Board of Directors may by resolution from time to time determine and publicize by means of reasonable notice given to any director who is not present at the meeting at which such resolution is adopted.

SECTION 8. SPECIAL MEETINGS. Special meetings of the Board of Directors may be called, orally or in writing, by or at the request of a majority of the directors, the Chairman of the Board, if one is elected, or the President. The person calling any such special meeting of the Board of Directors may fix the hour, date and place thereof.

SECTION 9. NOTICE OF MEETINGS. Notice of the hour, date and place of all special meetings of the Board of Directors shall be given to each director by the Secretary or an Assistant Secretary, or in case of the death, absence, incapacity or refusal of such persons, by the Chairman of the Board, if one is elected, or the President or such other officer designated by the Chairman of the Board, if one is elected, or the President. Notice of any special meeting of the Board of Directors shall be given to each director in person, by telephone, or by facsimile, electronic mail or other form of electronic communication, sent to his or her business or home address, at least 24 hours in advance of the meeting, or by written notice mailed to his or her business or home address, at least 48 hours in advance of the meeting. Such notice shall be deemed to be delivered when hand delivered to such address, read to such director by telephone, deposited in the mail so addressed, with postage thereon prepaid if mailed, dispatched or transmitted if faxed, telexed or telecopied, or when delivered to the telegraph company if sent by telegram.

A written waiver of notice signed before or after a meeting by a director and filed with the records of the meeting shall be deemed to be equivalent to notice of the meeting. The attendance of a director at a meeting shall constitute a waiver of notice of such meeting, except where a director attends a meeting for the express purpose of objecting at the beginning of the meeting to the transaction of any business because such meeting is not lawfully called or convened. Except as otherwise required by law, by the Certificate or by these By-laws, neither the business to be transacted at, nor the purpose of, any meeting of the Board of Directors need be specified in the notice or waiver of notice of such meeting.

SECTION 10. QUORUM. At any meeting of the Board of Directors, a majority of the total number of directors shall constitute a quorum for the transaction of business, but if less than a quorum is present at a meeting, a majority of the directors present may adjourn the meeting from time to time, and the meeting may be held as adjourned without further notice, except as provided in Section 9 of this Article II. Any business which might have been transacted at the meeting as originally noticed may be transacted at such adjourned meeting at which a quorum is present. For purposes of this section, the total number of directors includes any unfilled vacancies on the Board of Directors.

SECTION 11. ACTION AT MEETING. At any meeting of the Board of Directors at which a quorum is present, the vote of a majority of the directors present shall constitute action by the Board of Directors, unless otherwise required by law, by the Certificate or by these By-laws.

SECTION 12. ACTION BY CONSENT. Any action required or permitted to be taken at any meeting of the Board of Directors may be taken without a meeting if all members of the Board of Directors consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the records of the meetings of the Board of Directors. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form. Such consent shall be treated as a resolution of the Board of Directors for all purposes.

SECTION 13. MANNER OF PARTICIPATION. Directors may participate in meetings of the Board of Directors by means of conference telephone or other communications equipment by means of which all directors participating in the

meeting can hear each other, and participation in a meeting in accordance herewith shall constitute presence in person at such meeting for purposes of these By-laws.

SECTION 14. COMMITTEES. The Board of Directors, by vote of a majority of the directors then in office, may elect from its number one or more committees, including, without limitation, an Executive Committee, a Compensation Committee, a Stock Option Committee and an Audit Committee, and may delegate thereto some or all of its powers except those which by law, by the Certificate or by these By-laws may not be delegated. Except as the Board of Directors may otherwise determine, any such committee may make rules for the conduct of its business, but unless otherwise provided by the Board of Directors or in such rules, its business shall be conducted so far as possible in the same manner as is provided by these By-laws for the Board of Directors. All members of such committees shall hold such offices at the pleasure of the Board of Directors. The Board of Directors may abolish any such committee at any time. Any committee to which the Board of Directors delegates any of its powers or duties shall keep records of its meetings and shall report its action to the Board of Directors.

SECTION 14. COMPENSATION OF DIRECTORS. Directors shall receive such compensation for their services as shall be determined by a majority of the Board of Directors, or a designated committee thereof, provided that directors who are serving the Corporation as employees and who receive compensation for their services as such, shall not receive any salary or other compensation for their services as directors of the Corporation.

ARTICLE III

OFFICERS

SECTION 1. ENUMERATION. The officers of the Corporation shall consist of a President, a Treasurer, a Secretary and such other officers, including, without limitation, a Chairman of the Board of Directors, a Chief Executive Officer and one or more Vice Presidents (including

Executive Vice Presidents or Senior Vice Presidents), Assistant Vice Presidents, Assistant Treasurers and Assistant Secretaries, as the Board of Directors may determine.

SECTION 2. ELECTION. At the regular annual meeting of the Board of Directors following the Annual Meeting, the Board of Directors shall elect the President, the Treasurer and the Secretary. Other officers may be elected by the Board of Directors at such regular annual meeting of the Board of Directors or at any other regular or special meeting.

SECTION 3. QUALIFICATION. No officer need be a stockholder or a director. Any person may occupy more than one office of the Corporation at any time. Any officer may be required by the Board of Directors to give bond for the faithful performance of his or her duties in such amount and with such sureties as the Board of Directors may determine.

SECTION 4. TENURE. Except as otherwise provided by the Certificate or by these By-laws, each of the officers of the Corporation shall hold office until the regular annual meeting of the Board of Directors following the next Annual Meeting and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

SECTION 5. RESIGNATION. Any officer may resign by delivering his or her written resignation to the Corporation addressed to the President or the Secretary, and such resignation shall be effective upon receipt unless it is specified to be effective at some other time or upon the happening of some other event.

SECTION 6. REMOVAL. Except as otherwise provided by law, the Board of Directors may remove any officer with or without cause by the affirmative vote of a majority of the directors then in office.

SECTION 7. ABSENCE OR DISABILITY. In the event of the absence or disability of any officer, the Board of Directors may designate another officer to act temporarily in place of such absent or disabled officer.

SECTION 8. VACANCIES. Any vacancy in any office may be filled for the unexpired portion of the term by the Board of Directors.

SECTION 9. PRESIDENT. The President shall, subject to the direction of the Board of Directors, have general supervision and control of the Corporation's business. If there is no Chairman of the Board or if he or she is absent, the President shall preside, when present, at all meetings of stockholders and of

the Board of Directors. The President shall have such other powers and perform such other duties as the Board of Directors may from time to time designate.

SECTION 10. CHAIRMAN OF THE BOARD. The Chairman of the Board, if one is elected, shall preside, when present, at all meetings of the stockholders and of the Board of Directors.

The Chairman of the Board shall have such other powers and shall perform such other duties as the Board of Directors may from time to time designate.

SECTION 11. CHIEF EXECUTIVE OFFICER. The Chief Executive Officer, if one is elected, shall have such powers and shall perform such duties as the Board of Directors may from time to time designate.

SECTION 12. VICE PRESIDENTS AND ASSISTANT VICE PRESIDENTS. Any Vice President (including any Executive Vice President or Senior Vice President) and any Assistant Vice President shall have such powers and shall perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 13. TREASURER AND ASSISTANT TREASURERS. The Treasurer shall, subject to the direction of the Board of Directors and except as the Board of Directors or the Chief Executive Officer may otherwise provide, have general charge of the financial affairs of the Corporation and shall cause to be kept accurate books of account. The Treasurer shall have custody of all funds, securities, and valuable documents of the Corporation. He or she shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer.

Any Assistant Treasurer shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 14. SECRETARY AND ASSISTANT SECRETARIES. The Secretary shall record all the proceedings of the meetings of the stockholders and the Board of Directors (including committees of the Board) in books kept for that purpose. In his or her absence from any such meeting, a temporary secretary chosen at the meeting shall record the proceedings thereof. The Secretary shall have charge of the stock ledger (which may, however, be kept by any transfer or other agent of the Corporation). The Secretary shall have custody of the seal of the Corporation, and the Secretary, or an Assistant Secretary, shall have authority to affix it to any instrument requiring it, and, when so affixed, the seal may be attested by his or her signature or that of an Assistant Secretary. The Secretary shall have such other duties and powers as may be designated from time to time by the Board of Directors or the Chief Executive Officer. In the absence of the Secretary, any Assistant Secretary may perform his or her duties and responsibilities.

Any Assistant Secretary shall have such powers and perform such duties as the Board of Directors or the Chief Executive Officer may from time to time designate.

SECTION 15. OTHER POWERS AND DUTIES. Subject to these By-laws and to such limitations as the Board of Directors may from time to time prescribe, the officers of the Corporation shall each have such powers and duties as generally pertain to their respective offices, as well as such powers and duties as from time to time may be conferred by the Board of Directors or the Chief Executive Officer.

ARTICLE IV

CAPITAL STOCK

SECTION 1. CERTIFICATES OF STOCK. Each stockholder shall be entitled to a certificate of the capital stock of the Corporation in such form as may from time to time be prescribed by the Board of Directors. Such certificate shall be signed by the Chairman of the Board of Directors, the President or a Vice President and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary. The Corporation seal and the signatures by the Corporation's officers, the transfer agent or the registrar may be facsimiles. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed on such certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he or she were such officer, transfer agent or registrar at the time of its issue. Every certificate

for shares of stock which are subject to any restriction on transfer and every certificate issued when the Corporation is authorized to issue more than one class or series of stock shall contain such legend with respect thereto as is required by law.

SECTION 2. TRANSFERS. Subject to any restrictions on transfer and unless otherwise provided by the Board of Directors, shares of stock may be transferred only on the books of the Corporation by the surrender to the Corporation or its transfer agent of the certificate theretofore properly endorsed or accompanied by a written assignment or power of attorney properly executed, with transfer stamps (if necessary) affixed, and with such proof of the authenticity of signature as the Corporation or its transfer agent may reasonably require.

SECTION 3. RECORD HOLDERS. Except as may otherwise be required by law, by the Certificate or by these By-laws, the Corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect thereto, regardless of any transfer, pledge or other disposition of such stock, until the shares have been transferred on the books of the Corporation in accordance with the requirements of these By-laws.

SECTION 4. RECORD DATE. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date: (a) in the case of determination of stockholders entitled to vote at any meeting of stockholders, shall, unless otherwise required by law, not be more than sixty nor less than ten days before the date of such meeting and (b) in the case of any other action, shall not be more than sixty days prior to such other action. If no record date is fixed: (i) the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding

the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held and (ii) the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

SECTION 5. REPLACEMENT OF CERTIFICATES. In case of the alleged loss, destruction or mutilation of a certificate of stock, a duplicate certificate may be issued in place thereof, upon such terms as the Board of Directors may prescribe.

ARTICLE V

INDEMNIFICATION

SECTION 1. DEFINITIONS. For purposes of this Article:

(a) "Corporate Status" describes the status of a person who is serving or has served (i) as a Director of the Corporation, (ii) as an Officer of the Corporation, or (iii) as a director, partner, trustee, officer, employee or agent of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise which such person is or was serving at the request of the Corporation. For purposes of this Section 1(a), an Officer or Director of the Corporation who is serving or has served as a director, partner, trustee, officer, employee or agent of a Subsidiary shall be deemed to be serving at the request of the Corporation. Notwithstanding the foregoing, "Corporate Status" shall not include the status of a person who is serving or has served as a director, officer, employee or agent of a constituent corporation absorbed in a merger or consolidation transaction with the Corporation with respect to such person's activities prior to said transaction, unless specifically authorized by the Board of Directors or the stockholders of the Corporation;

(b) "Director" means any person who serves or has served the Corporation as a director on the Board of Directors of the Corporation;

(c) "Disinterested Director" means, with respect to each Proceeding in respect of which indemnification is sought hereunder, a Director of the Corporation who is not and was not a party to such Proceeding;

(d) "Expenses" means all reasonable attorneys' fees, retainers, court

costs, transcript costs, fees of expert witnesses, private investigators and professional advisors (including, without limitation, accountants and investment bankers), travel expenses, duplicating costs, printing and binding costs, costs of preparation of demonstrative evidence and other courtroom presentation aids and devices, costs incurred in connection with document review, organization, imaging and computerization, telephone charges, postage, delivery service fees, and all other disbursements, costs or expenses of the type customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, settling or otherwise participating in, a Proceeding;

(e) "Non-Officer Employee" means any person who serves or has served as an employee or agent of the Corporation, but who is not or was not a Director or Officer;

(f) "Officer" means any person who serves or has served the Corporation as an officer appointed by the Board of Directors of the Corporation;

(g) "Proceeding" means any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, inquiry, investigation, administrative hearing or other proceeding, whether civil, criminal, administrative, arbitrative or investigative; and

(h) "Subsidiary" shall mean any corporation, partnership, limited liability company, joint venture, trust or other entity of which the Corporation owns (either directly or through or together with another Subsidiary of the Corporation) either (i) a general partner, managing member or other similar interest or (ii) (A) 50% or more of the voting power of the voting capital equity interests of such corporation, partnership, limited liability company, joint venture or other entity, or (B) 50% or more of the outstanding voting capital stock or other voting equity interests of such corporation, partnership, limited liability company, joint venture or other entity.

SECTION 2. INDEMNIFICATION OF DIRECTORS AND OFFICERS. Subject to the operation of Section 4 of this Article V of these By-laws, each Director and Officer shall be indemnified and held harmless by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment) against any and all Expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by such Director or Officer or on such Director's or Officer's behalf in connection with any threatened, pending or completed Proceeding or any claim, issue or matter therein, which such Director or Officer is, or is threatened to be made, a party to or participant in by reason of such Director's or Officer's Corporate Status, if such Director or Officer acted in good faith and in a manner such Director or Officer reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The rights of indemnification provided by this Section 2 shall continue as to a Director or Officer after he or she has ceased to be a Director or Officer and shall inure to the benefit of his or her heirs, executors, administrators and personal representatives. Notwithstanding the foregoing, the Corporation shall indemnify any Director or Officer seeking indemnification in connection with a Proceeding initiated by such Director or Officer only if such Proceeding was authorized by the Board of Directors of the Corporation, unless such Proceeding was brought to enforce an Officer or Director's rights to indemnification or, in the case of Directors, advancement of Expenses under these By-laws in accordance with the provisions set forth herein.

SECTION 3. INDEMNIFICATION OF NON-OFFICER EMPLOYEES. Subject to the operation of Section 4 of this Article V of these By-laws, each Non-Officer Employee may, in the discretion of the Board of Directors of the Corporation, be indemnified by the Corporation to the fullest extent authorized by the DGCL, as the same exists or may hereafter be amended, against any or all Expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by such Non-Officer Employee or on such Non-Officer Employee's behalf in connection with any threatened, pending or completed Proceeding, or any claim, issue or matter therein, which such Non-Officer Employee is, or is threatened to be made, a party to or

participant in by reason of such Non-Officer Employee's Corporate Status, if such Non-Officer Employee acted in good faith and in a manner such Non-Officer Employee reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal proceeding, had no reasonable

cause to believe his or her conduct was unlawful. The rights of indemnification provided by this Section 3 shall exist as to a Non-Officer Employee after he or she has ceased to be a Non-Officer Employee and shall inure to the benefit of his or her heirs, personal representatives, executors and administrators. Notwithstanding the foregoing, the Corporation may indemnify any Non-Officer Employee seeking indemnification in connection with a Proceeding initiated by such Non-Officer Employee only if such Proceeding was authorized by the Board of Directors of the Corporation.

SECTION 4. GOOD FAITH. Unless ordered by a court, no indemnification shall be provided pursuant to this Article V to a Director, to an Officer or to a Non-Officer Employee unless a determination shall have been made that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the Corporation and, with respect to any criminal Proceeding, such person had no reasonable cause to believe his or her conduct was unlawful. Such determination shall be made by (a) a majority vote of the Disinterested Directors, even though less than a quorum of the Board of Directors, (b) a committee comprised of Disinterested Directors, such committee having been designated by a majority vote of the Disinterested Directors (even though less than a quorum), (c) if there are no such Disinterested Directors, or if a majority of Disinterested Directors so directs, by independent legal counsel in a written opinion, or (d) by the stockholders of the Corporation.

SECTION 5. ADVANCEMENT OF EXPENSES TO DIRECTORS PRIOR TO FINAL DISPOSITION.

(a) The Corporation shall advance all Expenses incurred by or on behalf of any Director in connection with any Proceeding in which such Director is involved by reason of such Director's Corporate Status within ten (10) days after the receipt by the Corporation of a written statement from such Director requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Director and shall be preceded or accompanied by an undertaking by or on behalf of such Director to repay any Expenses so advanced if it shall ultimately be determined that such Director is not entitled to be indemnified against such Expenses. Notwithstanding the foregoing, the Corporation shall advance all Expenses incurred by or on behalf of any Director seeking advancement of expenses hereunder in connection with a Proceeding initiated by such Director only if such Proceeding was (i) authorized by the Board of Directors of the Corporation, or (ii) brought to enforce Director's rights to indemnification or advancement of Expenses under these By-laws.

(b) If a claim for advancement of Expenses hereunder by a Director is not paid in full by the Corporation within 10 days after receipt by the Corporation of documentation of Expenses and the required undertaking, such Director may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim and if successful in whole or in part, such Director shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such

advancement of Expenses under this Article V shall not be a defense to the action and shall not create a presumption that such advancement is not permissible. The burden of proving that a Director is not entitled to an advancement of expenses shall be on the Corporation.

(c) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Director has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 6. ADVANCEMENT OF EXPENSES TO OFFICERS AND NON-OFFICER EMPLOYEES PRIOR TO FINAL DISPOSITION.

(a) The Corporation may, at the discretion of the Board of Directors of the Corporation, advance any or all Expenses incurred by or on behalf of any Officer and Non-Officer Employee in connection with any Proceeding in which such is involved by reason of the Corporate Status of such Officer or Non-Officer Employee upon the receipt by the Corporation of a statement or statements from such Officer or Non-Officer Employee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by such Officer and Non-Officer Employee and shall be preceded or accompanied by an undertaking by or on behalf of such to repay any Expenses so advanced if it shall ultimately be determined that such Officer or Non-Officer Employee is not entitled to be indemnified against such Expenses.

(b) In any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that the Officer or Non-Officer Employee has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 7. CONTRACTUAL NATURE OF RIGHTS.

(a) The foregoing provisions of this Article V shall be deemed to be a contract between the Corporation and each Director and Officer entitled to the benefits hereof at any time while this Article V is in effect, and any repeal or modification thereof shall not affect any rights or obligations then existing with respect to any state of facts then or theretofore existing or any Proceeding theretofore or thereafter brought based in whole or in part upon any such state of facts.

(b) If a claim for indemnification hereunder by a Director or Officer is not paid in full by the Corporation within 60 days after receipt by the Corporation of a written claim for indemnification, such Director or Officer may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim, and if successful in whole or in part, such Director or Officer shall also be entitled to be paid the expenses of prosecuting such claim. The failure of the Corporation (including its Board of Directors or any committee thereof, independent legal counsel, or stockholders) to make a determination concerning the permissibility of such indemnification under this Article V shall not be a defense to the action

and shall not create a presumption that such indemnification is not permissible. The burden of proving that a Director or Officer is not entitled to indemnification shall be on the Corporation.

(c) In any suit brought by a Director or Officer to enforce a right to indemnification hereunder, it shall be a defense that such Director or Officer has not met any applicable standard for indemnification set forth in the DGCL.

SECTION 8. NON-EXCLUSIVITY OF RIGHTS. The rights to indemnification and advancement of Expenses set forth in this Article V shall not be exclusive of any other right which any Director, Officer, or Non-Officer Employee may have or hereafter acquire under any statute, provision of the Certificate or these By-laws, agreement, vote of stockholders or Disinterested Directors or otherwise.

SECTION 9. INSURANCE. The Corporation may maintain insurance, at its expense, to protect itself and any Director, Officer or Non-Officer Employee against any liability of any character asserted against or incurred by the Corporation or any such Director, Officer or Non-Officer Employee, or arising out of any such person's Corporate Status, whether or not the Corporation would have the power to indemnify such person against such liability under the DGCL or the provisions of this Article V.

SECTION 10. OTHER INDEMNIFICATION. The Corporation's obligation, if any, to indemnify any person under this Article V as a result of such person serving, at the request of the Corporation, as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount such person may collect as indemnification from such other corporation, partnership, joint venture, trust, employee benefit plan or enterprise.

ARTICLE VI

MISCELLANEOUS PROVISIONS

SECTION 1. FISCAL YEAR. The fiscal year of the Corporation shall be determined by the Board of Directors.

SECTION 2. SEAL. The Board of Directors shall have power to adopt and alter the seal of the Corporation.

SECTION 3. EXECUTION OF INSTRUMENTS. All deeds, leases, transfers, contracts, bonds, notes and other obligations to be entered into by the Corporation in the ordinary course of its business without director action may be executed on behalf of the Corporation by the Chairman of the Board, if one is elected, the President or the Treasurer or any other officer, employee or agent of the Corporation as the Board of Directors or Executive Committee may authorize.

SECTION 4. VOTING OF SECURITIES. Unless the Board of Directors otherwise provides, the Chairman of the Board, if one is elected, the President or the Treasurer may waive notice of and act on behalf of this Corporation, or appoint another person or persons to act as proxy or attorney in fact for this Corporation with or without discretionary power and/or power of substitution, at any meeting of stockholders or shareholders of any other corporation or organization, any of whose securities are held by this Corporation.

SECTION 5. RESIDENT AGENT. The Board of Directors may appoint a resident agent upon whom legal process may be served in any action or proceeding against the Corporation.

SECTION 6. CORPORATE RECORDS. The original or attested copies of the Certificate, By-laws and records of all meetings of the incorporators, stockholders and the Board of Directors and the stock transfer books, which shall contain the names of all stockholders, their record addresses and the amount of stock held by each, may be kept outside the State of Delaware and shall be kept at the principal office of the Corporation, at the office of its counsel or at an office of its transfer agent or at such other place or places as may be designated from time to time by the Board of Directors.

SECTION 7. CERTIFICATE. All references in these By-laws to the Certificate shall be deemed to refer to the Amended and Restated Certificate of Incorporation of the Corporation, as amended and in effect from time to time.

SECTION 8. AMENDMENT OF BY-LAWS.

(a) AMENDMENT BY DIRECTORS. Except as provided otherwise by law, these By-laws may be amended or repealed by the Board of Directors by the affirmative vote of a majority of the directors then in office.

(b) AMENDMENT BY STOCKHOLDERS. These By-laws may be amended or repealed at any Annual Meeting, or special meeting of stockholders called for such purpose, by the affirmative vote of at least 75% of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class; provided, however, that if the Board of Directors recommends that stockholders approve such amendment or repeal at such meeting of stockholders, such amendment or repeal shall only require the affirmative vote of the majority of the outstanding shares entitled to vote on such amendment or repeal, voting together as a single class. Notwithstanding the foregoing, stockholder approval shall not be required unless mandated by the Certificate, these By-laws, or other applicable law.

SECTION 9. NOTICES. If mailed, notice to stockholders shall be deemed given when deposited in the mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the Corporation. Without limiting the manner by which notice otherwise may be given to stockholders, any notice to stockholders may be given by electronic transmission in the manner provided in Section 232 of the DGCL.

SECTION 10. WAIVERS. A written waiver of any notice, signed by a stockholder or director, or waiver by electronic transmission by such person, whether given before or after the time of the event for which notice is to be given, shall be deemed equivalent to the notice required to be given to such person. Neither the business nor the purpose of any meeting need be specified in such a waiver.

Adopted July 13, 2006 and effective as of _____, 2006.

EXHIBIT 4.2

THIS WARRANT HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAWS, AND MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR SOME OTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS IS AVAILABLE WITH RESPECT THERETO.

COMMON STOCK PURCHASE WARRANT

Warrant No. C-___ Number of Shares ___

METABOLIX, INC.

COMMON STOCK PURCHASE WARRANT

Void Unless Exercised before _____

This Warrant is one of the Common Stock Purchase Warrants (the "Warrants") evidencing the right to purchase shares of Common Stock of the Company issued pursuant to certain _____ Stock and Warrant Purchase Agreement (each, an "Agreement"), among the Company and the Investors named therein, a copy of which is on file at the principal office of the Company and this Warrant shall be subject to all of the provisions, including, without limitation, restrictions on transfer, set forth in the Agreements.

1. ISSUANCE. This Warrant is issued to _____ by Metabolix, Inc., a Delaware corporation (hereinafter with its successors called the "Company").

2. PURCHASE PRICE: NUMBER OF SHARES. Subject to the terms and conditions hereinafter set forth, the registered holder of this Warrant (the "Holder"), commencing on _____ (the "Original Issue Date"), is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the office of the Company, 21 Erie Street, Cambridge, Massachusetts 02139, or such other office as the Company shall notify the Holder of in writing, to purchase from the Company at a price per share (the "Purchase Price") of $_____, fully paid and nonassessable shares of Common Stock, $.01 par value, of the Company (the "Common Stock"). Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided.

3. PAYMENT OF PURCHASE PRICE. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus accrued interest to the date of surrender, (iii) through delivery by the Holder to the Company of other securities issued by the Company, with such securities

being credited against the Purchase Price in an amount equal to the fair market value thereof, as determined in good faith by the Board of Directors of the Company (the "Board"), or (iv) by any combination of the foregoing.

The Board shall promptly respond in writing to an inquiry by the Holder as to the fair market value of any securities the Holder may wish to deliver to the Company pursuant to clause (iii) above.

4. NET ISSUE ELECTION. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Common Stock as is computed using the following formula:

$$X = \frac{Y\,(A-B)}{A}$$

where

X = the number of shares to be issued to the Holder pursuant to this Section 4.

Y = the number of shares covered by this Warrant in respect of which the net issue election is made pursuant to this Section 4.

A = the fair market value of one share of Common Stock, as determined in good faith by the Board, as at the time the net issue election is made pursuant to this Section 4.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this Section 4.

The Board shall promptly respond in writing to an inquiry by the Holder as to the fair market value of one share of Common Stock.

5. PARTIAL EXERCISE. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. ISSUANCE DATE. The person or persons in whose name or names any certificate representing shares of Common Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

7. EXPIRATION DATE: AUTOMATIC EXERCISE. This Warrant shall expire at the close of business on _____, and shall be void thereafter.

8. RESERVED SHARES, VALID ISSUANCE. The Company covenants that it will at all times from and after the Original Issue Date reserve and keep available such number of its authorized shares of Common Stock, free from all preemptive or similar rights therein, as will be sufficient to permit the exercise of this Warrant in full. The Company further covenants that such shares as may be issued pursuant to the exercise of this Warrant will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. DIVIDENDS. If, after the Original Issue Date, the Company shall subdivide the Common Stock, by split-up or otherwise, or combine the Common Stock, or issue additional shares of Common Stock in payment of a stock dividend on the Common Stock, the number of shares issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. MERGERS AND RECLASSIFICATIONS. If after the Original Issue Date there shall be any reclassification, capital reorganization or change of the Common Stock (other than as a result of a subdivision, combination or stock dividend provided for in Section 9 hereof), or any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a consolidation or merger in which the Company is the continuing corporation and which does not result in any reclassification or change of the outstanding Common Stock), or any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company, then, as a condition of such reclassification, reorganization, change, consolidation, merger, sale or conveyance, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such reclassification, reorganization, change, consolidation, merger, sale or conveyance by a holder of the number of shares of Common Stock which might have been purchased by the Holder immediately prior to such reclassification, reorganization, change, consolidation, merger, sale or conveyance, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof.

11. FRACTIONAL SHARES. In no event shall any fractional share of Common Stock be issued upon any exercise of this Warrant. If, upon exercise of this

Warrant as an entirety, the Holder would, except as provided in this Section 11, be entitled to receive a fractional share of Common Stock, then the Company shall pay to the Holder, in cash or by check, the cash value of such fractional share, based upon the fair market value of one share of Common Stock as of the date of exercise, as determined in good faith by the Board.

12. CERTIFICATE OF ADJUSTMENT. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. NOTICES OF RECORD DATE, ETC. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right,

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets, or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company,

then and in each such event the Company will mail or cause to be mailed to the Holder a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, or (ii) the date on which any such reclassification, reorganization, consolidation, merger, sale or conveyance, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the holders of record in respect of such event are to be determined. Such notice shall be mailed at least 10 days prior to the date specified in such notice on which any such action is to be taken.

14. AMENDMENT. The terms of this Warrant may be amended, modified or waived only with the written consent of the Company and the holders of Warrants representing at least two-thirds of the number of shares of Common Stock then issuable upon the exercise of the Warrants. No such amendment, modification or waiver shall be effective as to this Warrant unless the terms of such amendment, modification or waiver shall apply with the same force and effect to all of the other Warrants then outstanding.

15. WARRANT REGISTER, LOST WARRANT, ETC.

A. The Company will maintain a register containing the names and addresses of the registered holders of the Warrants. The Holder may change its address as shown on the warrant register by written notice to the Company requesting such change. Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at its address as shown on the warrant register.

B. In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated

Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant (including a reasonably detailed affidavit with respect to the circumstances of any loss, theft or destruction) and of indemnity reasonably satisfactory to the Company.

C. Subject to compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, for transfer of this Warrant as an entirety by the Holder, the Company shall

issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer with respect to a portion of the shares of Common Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

16. NO IMPAIRMENT. The Company will not, by amendment of its Amended and Restated Certificate of Incorporation or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the Holder.

17. GOVERNING LAW. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the Commonwealth of Massachusetts without regard for the conflict of laws principles therein.

18. SUCCESSORS AND ASSIGNS. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

19. BUSINESS DAYS. If the last or appointed day for the taking of any action required or the expiration of any right granted herein shall be a Saturday or Sunday or a legal holiday in Massachusetts, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

[Remainder of Page Intentionally Left Blank]

METABOLIX, INC.

Dated:

By:

Name:
Title:

(Corporate Seal)

Attest:

- ---

SUBSCRIPTION
(To be signed only on exercise of Warrant)

To: Metabolix, Inc. Date:

The undersigned hereby subscribes for _____ shares of Common Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

Signature

Name for Registration

Mailing Address

NET ISSUE ELECTION NOTICE

To: ---------- Date: ----------

The undersigned hereby elects under Section 4 to surrender the right to purchase _____ shares of Common Stock pursuant to this Warrant. The certificate(s) for the shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below.

Signature

Name for Registration

Mailing Address

ASSIGNMENT
(To be signed only on transfer of Warrant)

For value received _____ hereby sells,

assigns and transfers unto _____

- ---
(Please print or typewrite name and address of Assignee)

- ---

the right represented by the within Warrant, and does hereby irrevocably constitute and appoint _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated:

In the Presence of:

- ---

Exhibit 10.1

METABOLIX INC.

1995 STOCK PLAN

(as amended as of March 3, 2003)

1. PURPOSE. The purpose of the 1995 Stock Plan of Metabolix Inc. (the "Plan") is to encourage key employees of Metabolix Inc. (the "Company") and of any present or future parent or subsidiary of the Company (collectively, "Related Corporations") and other individuals who render services to the Company or a Related Corporation, by providing opportunities to participate in the ownership of the Company and its future growth through (a) the grant of options which qualify as "incentive stock options" ("ISOs") under Section 422(b) of the Internal Revenue Code of 1986, as amended (the "Code"); (b) the grant of options which do not qualify as ISOs ("Non-Qualified Options"); (c) awards of stock in the Company ("Awards"); and (d) opportunities to make direct purchases of stock in the Company ("Purchases"). Both ISOs and Non-Qualified Options are referred to hereafter individually as an "Option" and collectively as "Options," Options, Awards and authorizations to make Purchases are referred to hereafter collectively as "Stock Rights." As used herein, the terms "parent" and "subsidiary" mean "parent corporation" and "subsidiary corporation," respectively, as those terms are defined in Section 424 of the Code.

2. ADMINISTRATION OF THE PLAN.

A. BOARD OR COMMITTEE ADMINISTRATION. The Plan shall be administered by the Board of Directors of the Company (the "Board") or by a committee appointed by the Board (the "Committee"); provided that the Plan shall be administered: (i) to the extent required by applicable regulations under Section 162(m) of the Code, by two or more "outside directors" (as defined in applicable regulations thereunder) and (ii) to the extent required by Rule 16b-3 promulgated under the Securities Exchange Act of 1934 or any successor provision ("Rule 16b-3"), by a disinterested administrator or administrators within the meaning of Rule 16b-3. Hereinafter, all references in this Plan to the "Committee" shall mean the Board if no Committee has been appointed. Subject to ratification of the grant or authorization of each Stock Right by the Board (if so required by applicable state law), and subject to the terms of the Plan, the Committee shall have the authority to (i) determine to whom (from among the class of employees eligible under paragraph 3 to receive ISOs) ISOs shall be granted, and to whom (from among the class of individuals and entities eligible under paragraph 3 to receive Non-Qualified Options and Awards and to make Purchases) Non-Qualified Options, Awards and authorizations to make Purchases may be granted; (ii) determine the time or times at which Options or Awards shall be granted or Purchases made; (iii) determine the purchase price of shares subject to each Option or Purchase, which prices shall not be less than the minimum price specified in paragraph 6; (iv) determine whether each Option granted shall be an ISO or a Non-Qualified Option; (v) determine (subject to paragraph 7) the time or times when each Option shall become exercisable and the duration of the exercise period; (vi) extend the period during which outstanding Options may be exercised; (vii) determine whether restrictions such as repurchase options are to be imposed on shares subject to Options, Awards and Purchases and the nature of such restrictions, if any, and (viii) interpret the Plan and prescribe and rescind rules and regulations relating to it. If the Committee determines to issue a Non-Qualified Option, it shall take whatever actions it deems necessary, under Section 422 of the Code and the regulations promulgated thereunder, to ensure that such Option is not treated as an ISO. The interpretation

and construction by the Committee of any provisions of the Plan or of any Stock Right granted under it shall be final unless otherwise determined by the Board. The Committee may from time to time adopt such rules and regulations for carrying out the Plan as it may deem advisable. No member of the Board or the Committee shall be liable for any action or determination made in good faith with respect to the Plan or any Stock Right granted under it.

B. COMMITTEE ACTIONS. The Committee may select one of its members as its chairman, and shall hold meetings at such time and places as it may determine. A majority of the Committee shall constitute a quorum and acts of a majority of the members of the Committee at a meeting at which a quorum is present, or acts reduced to or approved in writing by all the

members of the Committee (if consistent with applicable state law), shall be the valid acts of the Committee. From time to time the Board may increase the size of the Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies however caused, or remove all members of the Committee and thereafter directly administer the Plan.

C. GRANT OF STOCK RIGHTS TO BOARD MEMBERS. Subject to the provisions of the first sentence of paragraph 2(A) above, if applicable, Stock Rights may be granted to members of the Board. All grants of Stock Rights to members of the Board shall in all other respects be made in accordance with the provisions of this Plan applicable to other eligible persons. Consistent with the provisions of the first sentence of Paragraph 2(A) above, members of the Board who either (i) are eligible to receive grants of Stock Rights pursuant to the Plan or (ii) have been granted Stock Rights may vote on any matters affecting the administration of the Plan or the grant of any Stock Rights pursuant to the Plan, except that no such member shall act upon the granting to himself or herself of Stock Rights, but any such member may be counted in determining the existence of a quorum at any meeting of the Board during which action is taken with respect to the granting to such member of Stock Rights.

3. ELIGIBLE EMPLOYEES AND OTHERS. ISOs may be granted only to employees of the Company or any Related Corporation. Non-Qualified Options, Awards and authorizations to make Purchases may be granted to any employee, officer or director (whether or not also an employee) or consultant of the Company or any Related Corporation. The Committee may take into consideration a recipient's individual circumstances in determining whether to grant a Stock Right. The granting of any Stock Right to any individual or entity shall neither entitle that individual or entity to, nor disqualify such individual or entity from, participation in any other grant of Stock Rights.

4. STOCK. The stock subject to Stock Rights shall be authorized but unissued shares of Common Stock of the Company, par value $.01 per share (the "Common Stock"), or shares of Common Stock reacquired by the Company in any manner. The aggregate number of shares which may be issued pursuant to the Plan is one million (1,000,000), subject to adjustment as provided in paragraph 13 (such number reflects adjustment for all stock splits of the Company's Common Stock, $.01 par value, effected in, or prior to September 1998). If any Stock Right granted under the Plan shall expire or terminate for any reason without having been exercised in full or shall cease for any reason to be exercisable in whole or in part or shall be repurchased by the Company, the shares of Common Stock subject to such Stock Right shall again be available for grants of Stock Rights under the Plan.

5. GRANTING OF STOCK RIGHTS. Stock Rights may be granted under the Plan at any time on or after June 6, 1995 and prior to June 6, 2005. The date of grant of a Stock Right under the Plan will be

the date specified by the Committee at the time it grants the Stock Right; provided, however, that such date shall not be prior to the date on which the Committee acts to approve the grant.

6. MINIMUM OPTION PRICE; ISO LIMITATIONS.

A. PRICE FOR NON-QUALIFIED OPTIONS. AWARDS AND PURCHASES. The exercise price per share specified in the agreement relating to each Non-Qualified Option granted, and the purchase price per share of stock granted in any Award or authorized Purchase, under the Plan shall in no event be less than the minimum legal consideration required therefor under the laws of any jurisdiction in which the Company or its successors in interest may be organized.

B. PRICE FOR ISOs. The exercise price per share specified in the agreement relating to each ISO granted under the Plan shall not be less than the fair market value per share of Common Stock on the date of such grant. In the case of an ISO to be granted to an employee owning stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Related Corporation, the price per share specified in the agreement relating to such ISO shall not be less than one hundred ten percent (110%) of the fair market value per share of Common Stock on the date of grant. For purposes of determining stock ownership under this paragraph, the rules of Section 424(d) of the Code shall apply.

C. $100.000 ANNUAL LIMITATION ON ISO VESTING. Each eligible employee may be granted Options treated as ISOs only to the extent that, in the

aggregate under this Plan and all incentive stock option plans of the Company and any Related Corporation, ISOs do not become exercisable for the first time by such employee during any calendar year with respect to stock having a fair market value (determined at the time the ISOs were granted) in excess of $100,000. The Company intends to designate any Options granted in excess of such limitation as Non-Qualified Options.

D. DETERMINATION OF FAIR MARKET VALUE. If, at the time an Option is granted under the Plan, the Company's Common Stock is publicly traded, "fair market value" shall be determined as of the date of grant or, if the prices or quotes discussed in this sentence are unavailable for such date, the last business day for which such prices or quotes are available prior to the date of grant, and shall mean (i) the average (on that date) of the high and low prices of the Common Stock on the principal national securities exchange on which the Common Stock is traded, if the Common Stock is then traded on a national securities exchange; or (ii) the last reported sale price (on that date) of the Common Stock on the Nasdaq National Market, if the Common Stock is not then traded on a national securities exchange; or (iii) the closing bid price (or average of bid prices) last quoted (on that date) by an established quotation service for over-the-counter securities, if the Common Stock is not reported on the Nasdaq National Market. If the Common Stock is not publicly traded at the time an Option is granted under the Plan, "fair market value" shall mean the fair value of the Common Stock as determined by the Committee after taking into consideration all factors which it deems appropriate, including, without limitation, recent sale and offer prices of the Common Stock in private transactions negotiated at arm's length.

7. OPTION DURATION. Subject to earlier termination as provided in paragraphs 9 and 10 or in the agreement relating to such Option, each Option shall expire on the date specified by the Committee, but not more than (i) ten years from the date of grant in the case of Options generally and (ii) five years from the date of grant in the case of ISOs granted to an employee owning stock possessing

more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Related Corporation, as determined under paragraph 6(B). Subject to earlier termination as provided in paragraphs 9 and 10, the term of each ISO shall be the term set forth in the original instrument granting such ISO, except with respect to any part of such ISO that is converted into a Non-Qualified Option pursuant to paragraph 16.

8. EXERCISE OF OPTION. Subject to the provisions of paragraphs 9 through 12, each Option granted under the Plan shall be exercisable as follows:

A. VESTING. The Option shall either be fully exercisable on the date of grant or shall become exercisable thereafter in such installments as the Committee may specify.

B. FULL VESTING OF INSTALLMENTS. Once an installment becomes exercisable it shall remain exercisable until expiration or termination of the Option, unless otherwise specified by the Committee,

C. PARTIAL EXERCISE. Each Option or installment may be exercised at any time or from time to time, in whole or in part, for up to the total number of shares with respect to which it is then exercisable,

D. ACCELERATION OF VESTING. The Committee shall have the right to accelerate the date that any installment of any Option becomes exercisable; provided that the Committee shall not, without the consent of an optionee, accelerate the permitted exercise date of any installment of any Option granted to any employee as an ISO (and not previously converted into a Non-Qualified Option pursuant to paragraph 16) if such acceleration would violate the annual vesting limitation contained in Section 422(d) of the Code, as described in paragraph 6(C).

9. TERMINATION OF EMPLOYMENT. Unless otherwise specified in the agreement relating to such ISO, if an ISO optionee ceases to be employed by the Company and all Related Corporations other than by reason of death or disability as defined in paragraph 10, no further installments of his or her ISOs shall become exercisable, and his or her ISOs shall terminate on the earlier of (a) sixty (60) days after the date of termination of his or her employment, or (b) their specified expiration dates, except to the extent that such ISOs (or unexercised installments thereof) have been converted into Non-Qualified Options pursuant to paragraph 16. For purposes of this paragraph 9, employment shall be considered as continuing uninterrupted during any bona fide leave of absence (such as those attributable to illness, military obligations or governmental service) provided

that the period of such leave does not exceed 90 days or, if longer, any period during which such optionee's right to reemployment is guaranteed by statute. A bona fide leave of absence with the written approval of the Committee shall not be considered an interruption of employment under this paragraph 9, provided that such written approval contractually obligates the Company or any Related Corporation to continue the employment of the optionee after the approved period of absence. ISOs granted under the Plan shall not be affected by any change of employment within or among the Company and Related Corporations, so long as the optionee continues to be an employee of the Company or any Related Corporation. Nothing in the Plan shall be deemed to give any grantee of any Stock Right the right to be retained in employment or other service by the Company or any Related Corporation for any period of time.

10. DEATH: DISABILITY.

A. DEATH. If an ISO optionee ceases to be employed by the Company and all Related Corporations by reason of his or her death, any ISO owned by such optionee may be exercised, to the extent otherwise exercisable on the date of death, by the estate, personal representative or beneficiary who has acquired the ISO by will or by the laws of descent and distribution, until the earlier of (i) the specified expiration date of the ISO or (ii) 180 days from the date of the optionee's death.

B. DISABILITY. If an ISO optionee ceases to be employed by the Company and all Related Corporations by reason of his or her disability, such optionee shall have the right to exercise any ISO held by him or her on the date of termination of employment, for the number of shares for which he or she could have exercised it on that date, until the earlier of (i) the specified expiration date of the ISO or (ii) 180 days from the date of the termination of the optionee's employment. For the purposes of the Plan, the term "disability" shall mean "permanent and total disability" as defined in Section 22(e)(3) of the Code or any successor statute.

11. ASSIGNABILITY. No Stock Right shall be assignable or transferable by the grantee except by will, by the laws of descent and distribution or, in the case of Non-Qualified Options only, pursuant to a valid domestic relations order. Except as set forth in the previous sentence, during the lifetime of a grantee each Stock Right shall be exercisable only by such grantee.

12. TERMS AND CONDITIONS OF OPTIONS. Options shall be evidenced by instruments (which need not be identical) in such forms as the Committee may from time to time approve. Such instruments shall conform to the terms and conditions set forth in paragraphs 6 through 11 hereof and may contain such other provisions as the Committee deems advisable which are not inconsistent with the Plan, including restrictions applicable to shares of Common Stock issuable upon exercise of Options. The Committee may specify that any Non-Qualified Option shall be subject to the restrictions set forth herein with respect to ISOs, or to such other termination and cancellation provisions as the Committee may determine. The Committee may from time to time confer authority and responsibility on one or more of its own members and/or one or more officers of the Company to execute and deliver such instruments. The proper officers of the Company are authorized and directed to take any and all action necessary or advisable from time to time to carry out the terms of such instruments.

13. ADJUSTMENTS. Upon the occurrence of any of the following events, an optionee's rights with respect to Options granted to such optionee hereunder shall be adjusted as hereinafter provided, unless otherwise specifically provided in the written agreement between the optionee and the Company relating to such Option:

A. STOCK DIVIDENDS AND STOCK SPLITS. If the shares of Common Stock shall be subdivided or combined into a greater or smaller number of shares or if the Company shall issue any shares of Common Stock as a stock dividend on its outstanding Common Stock, the number of shares of Common Stock deliverable upon the exercise of Options shall be appropriately increased or decreased proportionately, and appropriate adjustments shall be made in the purchase price per share to reflect such subdivision, combination or stock dividend.

B. CONSOLIDATIONS OR MERGERS. If the Company is to be consolidated with or acquired by another entity in a merger, sale of all or substantially all of the Company's assets or otherwise (an "Acquisition"), the Committee or the board of directors of any entity assuming the obligations of the Company hereunder (the "Successor Board"), shall, as to outstanding Options,

either (i) make appropriate provision for the continuation of such Options by substituting on an equitable basis for the shares then subject to such Options either (a) the consideration payable with respect to the outstanding shares of Common Stock in connection with the Acquisition, (b) shares of stock of the surviving corporation or (c) such other securities as the Successor Board deems appropriate, the fair market value of which shall not materially exceed the fair market value of the shares of Common Stock subject to such Options immediately preceding the Acquisition; or (ii) upon written notice to the optionees, provide that all Options must be exercised, to the extent then exercisable, within a specified number of days of the date of such notice, at the end of which period the Options shall terminate; or (iii) terminate all Options in exchange for a cash payment equal to the excess of the fair market value of the shares subject to such Options (to the extent then exercisable) over the exercise price thereof.

C. RECAPITALIZATION OR REORGANIZATION. In the event of a recapitalization or reorganization of the Company (other than a transaction described in subparagraph B above) pursuant to which securities of the Company or of another corporation are issued with respect to the outstanding shares of Common Stock, an optionee upon exercising an Option shall be entitled to receive for the purchase price paid upon such exercise the securities he or she would have received if he or she had exercised such Option prior to such recapitalization or reorganization.

D. MODIFICATION OF ISOs. Notwithstanding the foregoing, any adjustments made pursuant to subparagraphs A, B or C with respect to ISOs shall be made only after the Committee, after consulting with counsel for the Company, determines whether such adjustments would constitute a "modification" of such ISOs (as that term is defined in Section 424 of the Code) or would cause any adverse tax consequences for the holders of such ISOs. If the Committee determines that such adjustments made with respect to ISOs would constitute a modification of such ISOs or would cause adverse tax consequences to the holders, it may refrain from making such adjustments.

E. DISSOLUTION OR LIQUIDATION. In the event of the proposed dissolution or liquidation of the Company, each Option will terminate immediately prior to the consummation of such proposed action or at such other time and subject to such other conditions as shall be determined by the Committee.

F. ISSUANCES OF SECURITIES. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares subject to Options. No adjustments shall be made for dividends paid in cash or in property other than securities of the Company.

G. FRACTIONAL SHARES. No fractional shares shall be issued under the Plan and the optionee shall receive from the Company cash in lieu of such fractional shares.

H. ADJUSTMENTS. Upon the happening of any of the events described in subparagraphs A, B or C above, the class and aggregate number of shares set forth in paragraph 4 hereof that are subject to Stock Rights which previously have been or subsequently may be granted under the Plan shall also be appropriately adjusted to reflect the events described in such subparagraphs. The Committee or the Successor Board shall determine the specific adjustments to be made under this paragraph 13 and, subject to paragraph 2, its determination shall be conclusive.

14. MEANS OF EXERCISING OPTIONS. An Option (or any part or installment thereof) shall be exercised by giving written notice to the Company at its principal office address, or to such transfer agent as the Company shall designate. Such notice shall identify the Option being exercised and specify the number of shares as to which such Option is being exercised, accompanied by full payment of the purchase price therefor either (a) in United States dollars in cash or by check, (b) at the discretion of the Committee, through delivery of shares of Common Stock having a fair market value equal as of the date of the exercise to the cash exercise price of the Option, (c) at the discretion of the Committee, by delivery of the grantee's personal recourse note bearing interest payable not less than annually at no less than 100% of the lowest applicable Federal rate, as defined in Section 1274(d) of the Code, (d) at the discretion of the Committee and consistent with applicable law, through the delivery of an assignment to the Company of a sufficient amount of the proceeds from the sale of the Common Stock acquired upon exercise of the Option and an authorization to

the broker or selling agent to pay that amount to the Company, which sale shall be at the participant's direction at the time of exercise, or (e) at the discretion of the Committee, by any combination of (a), (b), (c) and (d) above. If the Committee exercises its discretion to permit payment of the exercise price of an ISO by means of the methods set forth in clauses (b), (c), (d) or (e) of the preceding sentence, such discretion shall be exercised in writing at the time of the grant of the ISO in question. The holder of an Option shall not have the rights of a shareholder with respect to the shares covered by such Option until the date of issuance of a stock certificate to such holder for such shares. Except as expressly provided above in paragraph 13 with respect to changes in capitalization and stock dividends, no adjustment shall be made for dividends or similar rights for which the record date is before the date such stock certificate is issued.

15. TERM AND AMENDMENT OF PLAN. This Plan was adopted by the Board on June 6, 1995, subject, with respect to the validation of ISOs granted under the Plan, to approval of the Plan by the stockholders of the Company at the next Meeting of Stockholders or, in lieu thereof, by written consent. If the approval of stockholders is not obtained prior to June 6, 1996, any grants of ISOs under the Plan made prior to that date will be rescinded. The Plan shall expire at the end of the day on June 6, 2005 (except as to Options outstanding on that date). Subject to the provisions of paragraph 5 above. Options may be granted under the Plan prior to the date of stockholder approval of the Plan. The Board may terminate or amend the Plan in any respect at any time, except that, without the approval of the stockholders obtained within 12 months before or after the Board adopts a resolution authorizing any of the following actions: (a) the total number of shares that may be issued under the Plan may not be increased (except by adjustment pursuant to paragraph 13); (b) the benefits accruing to participants under the Plan may not be materially increased; (c) the requirements as to eligibility for participation in the Plan may not be materially modified; (d) the provisions of paragraph 3 regarding eligibility for grants of ISOs may not be modified; (e) the provisions of paragraph 6(B) regarding the exercise price at which shares may be offered pursuant to ISOs may not be modified (except by adjustment pursuant to paragraph 13); (f) the expiration date of the Plan may not be extended; and (g) the Board may not take any action which would cause the Plan to fail to comply with Rule 16b-3. Except as otherwise provided in this paragraph 15, in no event may action of the Board or stockholders alter or impair the rights of a grantee, without such grantee's consent, under any Option previously granted to such grantee.

16. CONVERSION OF ISOs INTO NON-QUALIFIED OPTIONS. The Committee, at the written request or with the written consent of any optionee, may in its discretion take such actions as may be necessary to convert such optionee's ISOs (or any installments or portions of installments thereof) that have not been exercised on the date of conversion into Non-Qualified Options at any time prior to the expiration of such ISOs, regardless of whether the optionee is an employee of the Company or a Related Corporation at the time of such conversion. Such actions may include, but shall not be limited to,

extending the exercise period or reducing the exercise price of the appropriate installments of such ISOs. At the time of such conversion, the Committee (with the consent of the optionee) may impose such conditions on the exercise of the resulting Non-Qualified Options as the Committee in its discretion may determine, provided that such conditions shall not be inconsistent with this Plan. Nothing in the Plan shall be deemed to give any optionee the right to have such optionee's ISOs converted into Non-Qualified Options, and no such conversion shall occur until and unless the Committee takes appropriate action.

17. APPLICATION OF FUNDS. The proceeds received by the Company from the sale of shares pursuant to Options granted and Purchases authorized under the Plan shall be used for general corporate purposes.

18. NOTICE TO COMPANY OF DISQUALIFYING DISPOSITION. By accepting an ISO granted under the Plan, each optionee agrees to notify the Company in writing immediately after such optionee makes a Disqualifying Disposition (as described in Sections 421, 422 and 424 of the Code and regulations thereunder) of any stock acquired pursuant to the exercise of ISOs granted under the Plan. A Disqualifying Disposition is generally any disposition occurring on or before the later of (a) the date two years following the date the ISO was granted or (b) the date one year following the date the ISO was exercised.

19. WITHHOLDING OF ADDITIONAL INCOME TAXES. Upon the exercise of a Non-Qualified Option, the grant of an Award, the making of a Purchase of Common Stock for less than its fair market value, the making of a Disqualifying Disposition (as defined in paragraph 18), the vesting or transfer of restricted stock or securities acquired on the exercise of an Option hereunder, or the making of a distribution or other payment with respect to such stock or

securities, the Company may withhold taxes in respect of amounts that constitute compensation includible in gross income. The Committee in its discretion may condition (i) the exercise of an Option, (ii) the grant of an Award, (iii) the making of a Purchase of Common Stock for less than its fair market value, or (iv) the vesting or transferability of restricted stock or securities acquired by exercising an Option, on the grantee's making satisfactory arrangement for such withholding. Such arrangement may include payment by the grantee in cash or by check of the amount of the withholding taxes or, at the discretion of the Committee, by the grantee's delivery of previously held shares of Common Stock or the withholding from the shares of Common Stock otherwise deliverable upon exercise of a Option shares having an aggregate fair market value equal to the amount of such withholding taxes.

20. GOVERNMENTAL REGULATION. The Company's obligation to sell and deliver shares of the Common Stock under this Plan is subject to the approval of any governmental authority required in connection with the authorization, issuance or sale of such shares.

Government regulations may impose reporting or other obligations on the Company with respect to the Plan. For example, the Company may be required to send tax information statements to employees and former employees that exercise ISOs under the Plan, and the Company may be required to file tax information returns reporting the income received by grantees of Options in connection with the Plan.

21. GOVERNING LAW. The validity and construction of the Plan and the instruments evidencing Options shall be governed by the laws of the Commonwealth of Massachusetts, or the laws of any jurisdiction in which the Company or its successors in interest may be organized.

REGISTER OF AMENDMENTS TO THE 1995 STOCK PLAN

APRIL 4, 1996 AT THE ANNUAL MEETING OF STOCKHOLDERS:

a. Paragraph 4 was adjusted to change the number of authorized shares from 109 to 10,900 shares in connection with a 100-for-one stock split of the Company's Common Stock, $.01 par value.

FEBRUARY 12, 1998 AMENDED BY BOARD OF DIRECTORS, RATIFIED BY STOCKHOLDERS ON NOVEMBER 19, 1998

a. Paragraph 4 was amended to increase the number of authorized shares from 10,900 to 13,400 shares.

SEPTEMBER 2, 1998 AMENDED BY BOARD OF DIRECTORS AND RATIFIED BY THE STOCKHOLDERS

a. Paragraph 4 was amended to increase the number of authorized shares from 13,400 to 134,000 shares in connection with a 10-for-l stock split.

NOVEMBER 19, 1998 AMENDED BY BOARD OF DIRECTORS, AND RATIFIED BY THE STOCKHOLDERS

a. Paragraph 4 was amended to increase the number of authorized shares from 134,000 to 200,000 shares.

NOVEMBER 24, 1999 AMENDED BY BOARD OF DIRECTORS, AND RATIFIED BY THE STOCKHOLDERS

a. Paragraph 4 was amended to increase the number of authorized shares from 200,000 to 550,000 shares.

MARCH 8, 2000 AMENDED BY BOARD OF DIRECTORS, AND RATIFIED BY THE STOCKHOLDERS

a. Paragraph 4 was amended to increase the number of authorized shares from 550,000 to 665,000 shares

MARCH 3, 2003 AMENDED BY BOARD OF DIRECTORS, AND RATIFIED BY THE STOCKHOLDERS ON APRIL 10, 2003

a. Paragraph 4 was amended to increase the number of authorized shares from 665,000 to 1,000,000 shares

Exhibit 10.1.1

METABOLIX, INC.

INCENTIVE STOCK OPTION AGREEMENT

Metabolix, Inc., a Delaware corporation (the "Company"), hereby grants as of February 28, 2002 (the "Grant Date") to DAVID SCOTT (the "Employee"), an option to purchase a maximum of 1,000 shares (the "Option Shares") of its Common Stock, $.01 par value ("Common Stock"), at the price of $2.70 per share on the following terms and conditions:

1. GRANT UNDER THE 1995 STOCK PLAN OF METABOLIX, INC. This option is granted pursuant to and is governed by the 1995 Stock Plan of Metabolix, Inc., (the "Plan") and, unless the context otherwise requires, terms used herein shall have the same meaning as in the Plan. Determinations made in connection with this option pursuant to the Plan shall be governed by the Plan as it exists on this date.

2. GRANT AS INCENTIVE STOCK OPTION: OTHER OPTIONS. This option is intended to qualify as an incentive stock option under Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"). This option is in addition to any other options heretofore or hereafter granted to the Employee by the Company or any Related Corporation (as defined in the Plan), but a duplicate original of this instrument shall not effect the grant of another option.

3. VESTING OF OPTION IF EMPLOYMENT CONTINUES. If the Employee has continued to be employed by the Company or any Related Corporation on the following dates, the Employee may exercise this option for the number of shares of Common Stock set opposite the applicable date:

Less than one year from September 1, 2000	-	0 shares
One year but less than two years from September 1, 2000	-	250 shares
Two years but less than three years from September 1, 2000	-	an additional 250 shares
Three years but less than four years from September 1, 2000	-	an additional 250 shares
Four years or more from September 1, 2000	-	an additional 250 shares

The foregoing rights are cumulative and, while the Employee continues to be employed by the Company or any Related Corporation, may be exercised on or before the date which is ten years from the date this option is granted. All of the foregoing rights are subject to Sections 4 and 5, as appropriate, if the Employee ceases to be employed by the Company and all Related Corporations.

4. TERMINATION EMPLOYMENT.

(a) TERMINATION: If the Employee ceases to be employed by the Company and all Related Corporations, other than by reason of death or disability as defined in Section 5, no further installments of this option shall become exercisable, and this option shall terminate after the passage of sixty (60) days from the Employee's last day of employment, but in no event later than the scheduled expiration date. In such a case, the Employee's only rights hereunder shall be those winch are properly exercised before the termination of this option.

5. DEATH; DISABILITY.

(a) DEATH: If the Employee dies while in the employ of the Company or any Related Corporation, this option may be exercised, to the extent otherwise exercisable on the date of his or her death, by the Employee's estate, personal representative or beneficiary to whom this option has been assigned pursuant to Section 10, at any time within 180 days after the date of death, but not later than, the scheduled expiration date.

(b) DISABILITY: If the Employee ceases to be employed by the Company

and all Related Corporations by reason of his or her disability (as defined in the Plan), this option may be exercised, to the extent otherwise exercisable on the date of the termination of his or her employment, at any time within 180 days after such termination, but not later than the scheduled expiration date.

(c) EFFECT OF TERMINATION; At the expiration of the 180-day period provided in paragraph (a) or (b) of this Section 5 or the scheduled expiration date, whichever is the earlier, this option shall terminate and the only rights hereunder shall be those as to which the option was properly exercised before such termination.

6. PARTIAL EXERCISE. This option may be exercised in part at any time and from time to time within the above limits, except that this option may not be exercised for a fraction of a share unless such exercise is with respect to the final installment of stock subject to this option and cash in lieu of a fractional share must be paid, in accordance with Paragraph 13(G) of the Plan, to permit the Employee to exercise completely such final installment. Any fractional share with respect to which an installment of this option cannot be exercised because of the limitation contained in the preceding sentence shall remain subject to this option and shall be available for later purchase by the Employee in accordance with the terms hereof.

7. PAYMENT OF PRICE. The option price shall be paid in United States dollars in the following manner:

(a) in cash or by check, or any combination of the foregoing, equal in amount to the option price; or

(b) in the discretion of the Company's Board of Directors, in cash, by check, by delivery of shares of the Company's Common Stock having a fair market value (as determined by the Board of Directors) equal as of the date of exercise to the option price, or by any combination of the foregoing, equal in amount to the option price.

Notwithstanding the foregoing, the Employee may not pay any part of the exercise price hereof by transferring Common Stock to the Company if such Company's Common Stock is both subject to a substantial risk of forfeiture and not transferable within the meaning of Section 83 of the Code.

8. RESTRICTIONS ON RESALE. Option Shares may not be transferred without the Company's written consent except by will, by the laws of descent and distribution and in accordance with the provisions of Sections 17 and 18, if applicable. Option Shares will be of an illiquid nature and will be deemed to be "restricted securities" for purposes of the Securities Act of 1933, as amended. Accordingly, such shares must be sold in compliance with the registration requirements of such Act or an exemption therefrom.

9. METHOD OF EXERCISING OPTION. Subject to the terms and conditions of this Agreement, this option may be exercised by written notice to the Company at its principal executive office, or to such transfer agent as the Company shall designate. Such notice shall state the election to exercise this option and the number of Option Shares for which it is being exercised and shall be signed by the person or persons so exercising this option. Such notice shall be accompanied by payment of the full purchase price of such shares (as provided in Section 7 hereof), and the Company shall deliver a certificate or certificates representing such shares as soon as practicable after the notice shall be received. Such certificate or certificates shall be registered in the name of the person or persons so exercising this option (or, if this option shall be exercised by the Employee and if the Employee shall so request in the notice exercising this option, shall be registered in the name of the Employee and another person jointly, with right of survivorship). In the event this option shall be exercised, pursuant to Section 5 hereof, by any person or persons other than the Employee, such notice shall be accompanied by appropriate proof of the right of such person or persons to exercise this option.

10. OPTION NOT TRANSFERABLE. This option is not transferable or assignable except by will or by the laws of descent and distribution. During the Employee's lifetime only the Employee can exercise this option.

11. NO OBLIGATION TO EXERCISE OPTION. The grant and acceptance of this option imposes no obligation on the Employee to exercise it.

12. NO OBLIGATION TO CONTINUE EMPLOYMENT. Neither the Plan, this Agreement, nor the grant of this option imposes any obligation on the Company or any Related Corporation to continue the Employee in employment.

13. NO RIGHTS AS STOCKHOLDER UNTIL EXERCISE. The Employee shall have no

rights as a stockholder with respect to the Option Shares until such time as the Employee has exercised this option by delivering a notice of exercise and has paid in full the purchase price for the shares so exercised in accordance with Section 9. Except as is expressly provided in the Plan with respect to certain changes in the capitalization of the Company, no adjustment shall be made for dividends or similar rights for which the record date is prior to such date of exercise.

14. CAPITAL CHANGES AND BUSINESS SUCCESSIONS. The Plan contains provisions covering the treatment of options in a number of contingencies such as stock splits and mergers. Provisions in the Plan for adjustment with respect to stock subject to options and the related provisions with respect to successors to the business of the Company are hereby made applicable hereunder and are incorporated herein by reference. The Option Shares shall include all shares issued in connection with such provisions.

15. EARLY DISPOSITION. The Employee agrees to notify the Company in writing immediately after the Employee transfers any Option Shares, if such transfer occurs on or before the later of (a) the date two years after the date of this Agreement or (b) the date one year after the date the Employee acquired such Option Shares. The Employee also agrees to provide the Company with any information concerning any such transfer required by the Company for tax purposes.

16. WITHHOLDING TAXES. If the Company or any Related Corporation in its discretion determines that it is obligated to withhold any tax in connection with the exercise of this option, or in connection with the transfer of, or the lapse of restrictions on, any Common Stock or other property acquired pursuant to this option, the Employee hereby agrees that the Company or any Related Corporation may withhold from the Employee's wages or other remuneration the appropriate amount of tax. At the discretion of the Company or Related Corporation, the amount required to be withheld may be withheld in cash from such wages or other remuneration or in kind from the Common Stock or other property otherwise deliverable to the Employee on exercise of this option. The Employee further agrees that, if the Company or any Related Corporation does not withhold an amount from the Employee's wages or other remuneration sufficient to satisfy the withholding obligation of the Company or Related Corporation, the Employee will make reimbursement on demand, in cash, for the amount underwithheld.

17. COMPANY'S RIGHT OF FIRST REFUSAL.

(a) EXERCISE OF RIGHT: If the Employee desires to transfer all or any part of the Option Shares to any person other than the Company (an "Offeror"), the Employee shall: (i) obtain in writing an irrevocable and unconditional bona fide offer (the "Offer") for the purchase thereof from the Offeror; and (ii) give written notice (the "Option Notice") to the Company setting forth the Employee's desire to transfer such shares, which Option Notice shall be accompanied by a photocopy of the Offer and shall set forth at least the name and address of the Offeror and the price and terms of the Offer. Upon receipt of the Option Notice, the Company shall have an assignable option to purchase any or all of such Option Shares (the "Company Option Shares") specified in the Option Notice, such option to be exercisable by giving, within 30 days after receipt of the Option Notice, a written counter-notice to the Employee. If the Company elects to purchase any or all of such Company Option Shares, it shall be obligated to purchase, and the Employee shall be obligated to sell to the Company, such Company Option Shares at the price and terms indicated in the Offer within 30 days from the date of delivery by the Company of such counter-notice.

(b) SALE OF OPTION SHARES TO OFFEROR: The Employee may, for 60 days after the expiration of the 30-day option period as set forth in Section 17(a), sell to the Offerer, pursuant to the terms of the Offer, any or all of such Company Option Shares not purchased or agreed to be purchased by the Company or its assignee; PROVIDED, HOWEVER, that the Employee shall not sell such Company Option Shares to such Offeror if such Offeror is a competitor of the Company and the Company gives written notice to the Employee, within 30 days of its receipt of the Option Notice, stating that the Employee shall not sell his or her Company Option Shares to such Offeror; and PROVIDED, FURTHER, that prior to the sale of such Option Shares to an offerer, such Offeror shall execute an agreement with the Company pursuant to which such Offeror agrees to be subject to the restrictions set forth in this Section 17. If any or all of such Company Option Shares are not sold pursuant to an Offer within the time permitted above, the unsold Company Option Shares shall remain subject to the terms of this Section 17.

(c) ADJUSTMENTS FOR CHANGES IN CAPITAL STRUCTURE: If there shall be

any change in the Common Stock of the Company through merger, consolidation, reorganization, recapitalization,

stock dividend, stock split, combination or exchange of shares, or the like, the restrictions contained in this Section 17 shall apply with equal force to additional and/or substitute securities, if any, received by the Employee in exchange for, or by virtue of his or her ownership of, Option Shares.

(d) FAILURE TO DELIVER OPTION SHARES: If the Employee fails or refuses to deliver on a timely basis duly endorsed certificates representing Company Option Shares to be sold to the Company or its assignee pursuant to this Section 17, the Company shall have the right to deposit the purchase price for such Company Option Shares in a special account with any bank or trust company in the Commonwealth of Massachusetts, giving notice of such deposit to the Employee, whereupon such Company Option Shares shall be deemed to have been purchased by the Company. All such monies shall he held by the bank or trust company for the benefit of the Employee. All monies deposited with the bank or trust company but remaining unclaimed for two years after the date of deposit shall be repaid by the bank or trust company to the Company on demand, and the Employee shall thereafter look only to the Company for payment. The Company may place a legend on any certificate for Option Shares delivered to the Employee reflecting the restrictions on transfer provided in Section 8 hereof and this Section 17,

(e) EXPIRATION OF COMPANY'S RIGHT OF FIRST REFUSAL: The first refusal rights of the Company set forth above shall remain in effect until such time, if ever, as a distribution to the public is made of shares of the Company's Common Stock pursuant to a registration statement filed under the Securities Act of 1933, as amended, or a successor statute, at which time the refusal rights of the Company set forth herein will automatically expire.

18. COMPANY'S RIGHT OF REPURCHASE.

(a) RIGHT OF REPURCHASE. The Company shall have the right (the "Repurchase Right") to repurchase all of the Option Shares from the holder of this option upon the occurrence of any of the events specified in Section 18(b) below (the "Repurchase Event"). The Repurchase Right may be exercised by the Company within 60 days following the later of the date of the exercise of this option or the date the Company receives actual knowledge of such event (the "Repurchase Period"). The Repurchase Right shall be exercised by the Company by giving the holder written notice on or before the last day of the Repurchase Period of its intention to exercise the Repurchase Right, and, together with such notice, tendering to the holder an amount equal to the greater of the option price or the fair market value of the shares. The Company may assign the Repurchase Right to one or more persons. Upon timely exercise of the Repurchase Right in the manner provided in this Section 18(a), the holder shall deliver to the Company the stock certificate or certificates representing the shares being repurchased, duly endorsed and free and clear of any and all liens, charges and encumbrances.

If shares are not purchased under the Repurchase Right, the Employee and his or her successor in interest, if any, will hold any such shares in his or her possession subject to all of the provisions of tin's Agreement.

(b) COMPANY'S RIGHT TO EXERCISE REPURCHASE RIGHT: The Company shall have the Repurchase Right in the event that any of the following events shall occur:

(i) The termination of the Employee's employment with the Company and all Related Corporations, voluntarily or involuntarily, for any reason whatsoever including death or permanent disability;

(ii) The receivership, bankruptcy or other creditor's proceeding regarding the Employee or the taking of any of Employee's shares acquired upon exercise of tins option by legal process, such as a levy of execution; or

(iii) Distribution of shares held by the Employee to his or her spouse as such spouse's joint or community interest pursuant to a decree of dissolution, operation of law, divorce, property settlement agreement or for any other reason, except as may be otherwise permitted by the Company.

(c) DETERMINATION OF FAIR MARKET VALUE: The fair market value of the

Option Shares shall be, for purposes of this Section 18, determined in accordance with Section 6D of the Plan as of the date of the Repurchase Event. The determination by the Board of Directors of the fair market value shall be conclusive and binding.

(d) EXPIRATION OF COMPANY'S REPURCHASE RIGHT: The Repurchase Right shall remain in effect until such time, if ever, as (i) the Option Shares are transferred in accordance with Section 17 hereof or (ii) a distribution to the public is made of shares of the Company's Comrnon Stock pursuant to a registration statement filed under the Securities Act of 1933, as amended, or any successor statute.

19. LOCK-UP AGREEMENT. The Employee agrees that in connection with an underwritten public offering of Common Stock, upon the request of the Company or the principal underwriter managing such public offering, this Option and the Option Shares may not be sold, offered for sale or otherwise disposed of without the prior written consent of the Company or such underwriter, as the case may be, for at least 180 days after the effectiveness of the Registration Statement filed in connection with such offering, or such longer period of time as the Board of Directors may determine if all of the Company's directors and officers agree to be similarly bound. The lock-up agreement established pursuant to this paragraph 19 shall have perpetual duration.

20. PROVISION OF DOCUMENTATION TO EMPLOYEE. By signing this Agreement the Employee acknowledges receipt of a copy of this Agreement and a copy of the Plan.

21. MISCELLANEOUS.

(a) NOTICES: All notices hereunder shall be in writing and shall be deemed given when sent by certified or registered mail, postage prepaid, return receipt requested, to the address set forth below. The addresses for such notices may be changed from time to time by written notice given in the manner provided for herein.

(b) ENTIRE AGREEMENT; MODIFICATION: This Agreement constitutes the entire agreement between the parties relative to the subject matter hereof, and supersedes all proposals, written or oral, and all other communications between the parties relating to the subject matter of this Agreement. This Agreement may be modified, amended or rescinded only by a written agreement executed by both parties.

(c) SEVERABILITY: The invalidity, illegality or unenforceability of any provision of this Agreement shall in no way affect the validity, legality or enforceability of any other provision.

(d) SUCCESSORS AND ASSIGNS: This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, subject to the limitations set forth in Section 10 hereof.

(c) GOVERNING LAW: This Agreement shall be governed by and interpreted in accordance with the laws of the Commonwealth of Massachusetts without giving effect to the principles of the conflicts of laws thereof.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company and the Employee have caused this instrument to be executed as of the date first above written.

/s/ David Scott
- ----------
Employee

DAVID SCOTT
- ----------
Print Name of Employee

27 Calvin St. #1
- ----------
Street Address

Somerville, MA 02143

METABOLIX, INC.
303 Third Street
Cambridge, MA 02142-1196

By: /s/ James Barber

James Barber
President and Chief Executive Officer

- ------------------------------
City State Zip Code

Exhibit 10.1.2

METABOLIX INC.

NON-QUALIFIED STOCK OPTION AGREEMENT

Metabolix Inc., a Massachusetts corporation (the "Company"), hereby grants as of [Grant Date] to [FIRSTNAME] [LASTNAME] (the "Optionee"), an option to purchase a maximum of [SHARES] shares (the "Option Shares") of its Common Stock, $.01 par value ("Common Stock"), at the price of [PRICE] per share, on the following terms and conditions:

1. GRANT UNDER THE 1995 STOCK PLAN OF METABOLIX INC. This option is granted pursuant to and is governed by the 1995 Stock Plan of Metabolix Inc. (the "Plan") and, unless the context otherwise requires, terms used herein shall have the same meaning as in the Plan. Determinations made in connection with this option pursuant to the Plan shall be governed by the Plan as it exists on this date.

2. GRANT AS NON-QUALIFIED OPTION; OTHER OPTIONS. This option shall be treated for federal income tax purposes as a Non-Qualified Option (rather than an incentive stock option). This option is in addition to any other options heretofore or hereafter granted to the Optionee by the Company or any Related Corporation (as defined in the Plan), but a duplicate original of this instrument shall not effect the grant of another option.

3. VESTING OF OPTION IF BUSINESS RELATIONSHIP CONTINUES. If the Optionee has continued to serve the Company or any Related Corporation in the capacity of an advisor or consultant (such service is described herein as maintaining or being involved in a "Business Relationship with the Company") on the following dates, this option shall vest, and thus become exercisable, in accordance with the following schedule:

PERCENTAGE OF THIS OPTION DATE OF VESTING	WHICH WILL BECOME EXERCISABLE
Less than one year from	- 0%
[Vesting Date] One year from	[Vesting Date] - an additional 25%
Two years from	[Vesting Date] - an additional 25%
Three years from	[Vesting Date] - an additional 25%
Four years from	[Vesting Date] - an additional 25%

The foregoing rights are cumulative and, while the Optionee continues to maintain a Business Relationship with the Company or any Related Corporation, may be exercised up to and including the date which is ten years from the date this option is granted.

4. TERMINATION OF BUSINESS RELATIONSHIP.

(a) GENERAL: If the Optionee's Business Relationship with the Company and all Related Corporations is terminated for any reason, including by reason of death or disability, no further installments of this option shall become exercisable. Any option that is exercisable prior to such termination shall remain exercisable until the scheduled expiration date.

(b) TERMINATION FOR CAUSE. Notwithstanding anything to the contrary herein, if the Optionee's Business Relationship is terminated by the Company without Cause, an additional number of option shall become exercisable as is equal to 25% of the number of then unvested options. For the purposes herein, "CAUSE" shall mean conduct involving one or more of the following: (i) the substantial and continuing failure of the Optionee, after notice thereof, to render services to the Company in accordance with the terms or requirements of his Business Relationship; (ii) disloyalty, gross negligence, willful misconduct, dishonesty, fraud or breach of fiduciary duty to the Company; (iii) deliberate disregard of the rules or policies of the Company, or breach of an advisors, consulting, employment or other agreement with the Company, which results in direct or indirect loss, damage or injury to the Company; (iv) the unauthorized disclosure of any trade secret or confidential information of the Company; or (v) the commission of an act which constitutes unfair competition with the Company or which induces any customer or supplier to breach a contract with the Company.

5. DEATH; DISABILITY; DISSOLUTION.

(a) DEATH: If the Optionee is a natural person who dies while involved in a Business Relationship with the Company, this option may be exercised, to the extent otherwise exercisable on the date of his or her death, by the Optionee's estate, personal representative or beneficiary to whom this option has been assigned pursuant to Section 10 at any time before the scheduled expiration date.

(b) DISABILITY: If Optionee's Business Relationship with the Company is terminated by reason of his disability (as defined in the Plan), this option may be exercised, to the extent otherwise exercisable on the date the Business Relationship was terminated at any time before the scheduled expiration date.

(c) EFFECT OF TERMINATION: This option shall terminate on the expiration date and the only rights hereunder shall be those as to which the option was properly exercised before such termination.

6. PARTIAL EXERCISE. This option may be exercised in part at any time and from time to time within the above limits, except that this option may not be exercised for a fraction of a share unless such exercise is with respect to the final installment of stock subject to this option and cash in lieu of a fractional share must be paid, in accordance with Paragraph 13(G) of the Plan, to permit the Optionee to exercise completely such final installment. Any fractional share with respect to which an installment of this option cannot be exercised because of the limitation contained in the preceding sentence shall remain subject to this option and shall be available for later purchase by the Optionee in accordance with the terms hereof.

7. PAYMENT OF PRICE. The option price is payable in United States dollars and may be paid:

(a) in cash or by check, or any combination of the foregoing, equal in amount to the option price; or

(b) in the discretion of the Company's Board of Directors, in cash, by check, by delivery of shares of the Company's Common Stock having a fair market value (as determined by the Board of Directors) equal as of the date of exercise to the option price, or by any combination of the foregoing, equal in amount to the option price.

Notwithstanding the foregoing, the Optionee may not pay any part of the exercise price hereof by transferring Common Stock to the Company if such Company's Common Stock is both subject to a substantial risk of forfeiture and not transferable within the meaning of Section 83 of the Code.

8. RESTRICTIONS ON TRANSFER. Option Shares may not be transferred without the Company's written consent except by will, by the laws of descent and distribution, or in accordance with the provisions of Sections 16 and 17, if

applicable. Option Shares will be of an illiquid nature and will be deemed to be "restricted securities" for purposes of the Securities Act of 1933, as amended. Accordingly, such shares must be sold in compliance with the registration requirements of such Act or an exemption therefrom.

9. METHOD OF EXERCISING OPTION. Subject to the terms and conditions of this Agreement, this option may be exercised by written notice to the Company, at the principal executive office of the Company, or to such transfer agent as the Company shall designate. Such notice shall state the election to exercise this option and the number of Option Shares for which it is being exercised and shall be signed by the person or persons so exercising this option. Such notice shall be accompanied by payment of the full purchase price of such shares (as provided in Section 7 hereof), and the Company shall deliver a certificate or certificates representing such shares as soon as practicable after the notice shall be received. Such certificate or certificates shall be registered in the name of the person or persons so exercising this option (or, if this option shall be exercised by the Optionee and if the Optionee shall so request in the notice exercising this option, shall be registered in the name of the Optionee and another person jointly, with right of survivorship). In the event this option shall be exercised, pursuant to Section 5 hereof, by any person or persons other than the Optionee, such notice shall be accompanied by appropriate proof of the right of such person or persons to exercise this option.

10. OPTION NOT TRANSFERABLE. This option is not transferable or assignable except by will or by the laws of descent and distribution. During the Optionee's lifetime, only the Optionee can exercise this option.

11. NO OBLIGATION TO EXERCISE OPTION. The grant and acceptance of this option imposes no obligation on the Optionee to exercise it.

12. NO OBLIGATION TO CONTINUE BUSINESS RELATIONSHIP. Neither the Plan, this Agreement, nor the grant of this option imposes any obligation on the Company or any Related Corporation to continue to maintain a Business Relationship with the Optionee.

13. NO RIGHTS AS STOCKHOLDER UNTIL EXERCISE. The Optionee shall have no rights as a stockholder with respect to the Option Shares until such time as the Optionee has exercised this option by delivering a notice of exercise and has paid in full the purchase price for the number of shares for which this option is to be so exercised in accordance with Section 9. Except as is expressly provided in the Plan with respect to certain changes in the capitalization of the Company, no adjustment shall be made for dividends or similar rights for which the record date is prior to such date of exercise.

14. CAPITAL CHANGES AND BUSINESS SUCCESSIONS. The Plan contains provisions covering the treatment of options in a number of contingencies such as stock splits and mergers. Provisions in the Plan for adjustment with respect to stock subject to options and the related provisions with respect to successors to the business of the Company are hereby made applicable hereunder and are incorporated herein by reference.

15. WITHHOLDING TAXES. If the Company or any Related Corporation in its discretion determines that it is obligated to withhold any tax in connection with the exercise of this option, or in connection with the transfer of, or the lapse of restrictions on, any Common Stock or other property acquired pursuant to this option, the Optionee hereby agrees that the Company or any Related Corporation may withhold from the Optionee's wages or other remuneration the appropriate amount of tax. At the discretion of the Company or Related Corporation, the amount required to be withheld may be withheld in cash from such wages or other remuneration or in kind from the Common Stock or other property otherwise deliverable to the Optionee on exercise of this option. The Optionee further agrees that, if the Company or Related Corporation does not withhold an amount from the Optionee's wages or other remuneration sufficient to satisfy the withholding obligation of the Company or Related Corporation, the Optionee will make reimbursement on demand, in cash, for the amount under withheld.

16. COMPANY'S RIGHT OF FIRST REFUSAL.

(a) EXERCISE OF RIGHT: If the Optionee or his or her legal representative (the "Transferor") desires to transfer all or any part of the Option Shares to any person other than the Company (an "Offeror"), the Transferor shall: (i) obtain in writing an irrevocable and unconditional bona fide offer (the "Offer") for the purchase thereof from the Offeror; and (ii) give written notice (the "Option Notice") to the Company setting forth the Optionee's desire to transfer such shares, which Option Notice shall be

accompanied by a photocopy of the Offer and shall set forth at least the name and address of the Offeror and the price and terms of the bona fide offer. Upon receipt of the Option Notice, the Company shall have an assignable option to purchase any or all of such shares (the "Company Option Shares") specified in the Option Notice, such option to be exercisable by giving, within 30 days after receipt of the Option Notice, a written counter-notice to the Transferor. If the Company elects to purchase any or all of such Company Option Shares, it shall be obligated to purchase, and the Optionee shall be obligated to sell to the Company, such Company Option Shares at the price and terms

indicated in the Offer within 30 days from the date of delivery by the Company of such counter-notice.

(b) SALE OF OPTION SHARES TO OFFEROR: The Transferor may, for 60 days after the expiration of the 30-day period during which the Company may give the counter-notice, sell, pursuant to the terms of the Offer, any or all of such Company Option Shares not purchased or agreed to be purchased by the Company or its assignee; PROVIDED, HOWEVER, that the Transferor shall not sell such Company Option Shares to the Offeror if the Offeror is a competitor of the Company and the Company gives written notice to the Transferor, within 30 days of its receipt of the Option Notice, stating that the Transferor shall not sell such Company Option Shares to such Offeror; and PROVIDED, FURTHER, that prior to the sale of such Company Option Shares to the Offeror, the Offeror shall execute an agreement with the Company pursuant to which the Offeror agrees to be subject to the restrictions set forth in this Section 16. If any or all of such Company Option Shares are not sold pursuant to an Offer within the time permitted above, the unsold Company Option Shares shall remain subject to the terms of this Section 16.

(c) ADJUSTMENTS FOR CHANGES IN CAPITAL STRUCTURE: If there shall be any change in the Common Stock of the Company through merger, consolidation, reorganization, recapitalization, stock dividend, stock split, combination or exchange of shares, or the like, the restrictions contained in this Section 16 shall apply with equal force to additional and/or substitute securities, if any, received by the Optionee in exchange for, or by virtue of his or her ownership of, Company Option Shares.

(d) FAILURE TO DELIVER COMPANY OPTION SHARES: If the Transferor fails or refuses to deliver on a timely basis duly endorsed certificates representing Company Option Shares to be sold to the Company or its assignee pursuant to this Section 16, the Company shall have the right to deposit the purchase price for such Company Option Shares in a special account with any bank or trust company in the Commonwealth of Massachusetts, giving notice of such deposit to the Transferor, whereupon such Company Option Shares shall be deemed to have been purchased by the Company. All such monies shall be held by the bank or trust company for the benefit of the Transferor. All monies deposited with the bank or trust company remaining unclaimed for two years after the date of deposit shall be repaid by the bank or trust company to the Company on demand, and the Transferor shall thereafter look only to the Company for payment. The Company may place a legend on any stock certificate delivered to the Transferor reflecting the restrictions on transfer provided in Section 8 hereof and this Section 16.

(e) EXPIRATION OF COMPANY'S RIGHT OF FIRST REFUSAL: The first refusal rights of the Company set forth above shall remain in effect until such time, if ever, as a distribution to the public is made of shares of the Company's Common Stock pursuant to a registration statement filed under the Securities Act of 1933, as amended, or a successor statute, at which time the first refusal rights of the Company set forth herein will automatically expire.

17. COMPANY'S RIGHT OF REPURCHASE.

(a) RIGHT OF REPURCHASE. The Company shall have the right (the "Repurchase Right") to repurchase from the holder of this option all of the Option Shares then

owned by such holder, upon the occurrence of any of the events specified in Section 17(b) below (a "Repurchase Event"). The Repurchase Right may be exercised by the Company within 60 days following the later of the date of the exercise of this option or the date the Company receives actual knowledge of such event (the "Repurchase Period"). The Repurchase Right shall be exercised by

the Company by giving the holder written notice on or before the last day of the Repurchase Period of its intention to exercise the Repurchase Right, and, together with such notice, tendering to the holder an amount equal to the greater of the option price or the fair market value of the shares. The Company may assign the Repurchase Right to one or more persons. Upon timely exercise of the Repurchase Right in the manner provided in this Section 17(a), the holder shall deliver to the Company the stock certificate or certificates representing the shares being repurchased, duly endorsed and free and clear of any and all liens, charges and encumbrances.

If shares are not purchased under the Repurchase Right, the Optionee and his or her successor in interest, if any, will hold any such shares in his or her possession subject to all of the provisions of this Agreement.

(b) COMPANY'S RIGHT TO EXERCISE REPURCHASE RIGHT: The Company shall have the Repurchase Right in the event that any of the following events shall occur:

(i) The termination of the Optionee's Business Relationship with the Company, voluntarily or involuntarily, for any reason whatsoever including death or permanent disability;

(ii) The receivership, bankruptcy or other creditor's proceeding regarding the Optionee or the taking of any of the Optionee's shares acquired upon exercise of this option by legal process, such as a levy of execution;

(iii) Distribution of shares held by the Optionee to his or her spouse as such spouse's joint or community interest pursuant to a decree of dissolution, operation of law, divorce, property settlement agreement or for any other reason, except as may be otherwise permitted by the Company;

(c) DETERMINATION OF FAIR MARKET VALUE: The fair market value of the Option Shares shall be, for purposes of this Section 17, determined in accordance with Section 6D of the Plan as of the date of the Repurchase Event. The determination by the Board of Directors of the fair market value shall be conclusive and binding.

(d) EXPIRATION OF COMPANY'S REPURCHASE RIGHT: The Repurchase Right shall remain in effect until such time, if ever, as (i) such shares are transferred in accordance with Section 16 hereof or the Company's written consent or (ii) a distribution to the public is made of shares of the Company's Common Stock pursuant to a registration statement filed under the Securities Act of 1933, as amended, or any successor statute.

18. PROVISION OF DOCUMENTATION TO OPTIONEE. By signing this Agreement the Optionee acknowledges receipt of a copy of this Agreement and a copy of the Plan.

19. MISCELLANEOUS.

(a) NOTICES: All notices hereunder shall be in writing and shall be deemed given when sent by certified or registered mail, postage prepaid, return receipt requested, to the address set forth below. The addresses for such notices may be changed from time to time by written notice given in the manner provided for herein.

(b) ENTIRE AGREEMENT; MODIFICATION: This Agreement constitutes the entire agreement between the parties relative to the subject matter hereof, and supersedes all proposals, written or oral, and all other communications between the parties relating to the subject matter of this Agreement. This Agreement may be modified, amended or rescinded only by a written agreement executed by both parties.

(c) SEVERABILITY: The invalidity, illegality or unenforceability of any provision of this Agreement shall in no way affect the validity, legality or enforceability of any other provision.

(d) SUCCESSORS AND ASSIGNS: This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, subject to the limitations set forth in Section 10 hereof.

(E) GOVERNING LAW: This Agreement shall be governed by and interpreted in accordance with the laws of the Commonwealth of Massachusetts, without giving effect to the principles of the conflicts of laws thereof. The preceding choice of law provision shall apply to all claims, under any theory

whatsoever, arising out of the relationship of the parties contemplated herein.

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IN WITNESS WHEREOF, the Company and the Optionee have caused this instrument to be executed as of the date first above written.

- ----------	METABOLIX INC.
Optionee	303 Third Street
	Cambridge, MA 02142-1196
[FIRSTNAME] [LASTNAME]	By:
- ----------	----------
Print Name of Optionee	James J. Barber
	President and Chief Executive Officer
- ----------	
Street Address	
- ----------	
City State Zip Code	

Exhibit 10.2

METABOLIX, INC.

2005 STOCK PLAN

1. DEFINITIONS.

Unless otherwise specified or unless the context otherwise requires, the following terms, as used in this Metabolix, Inc. 2005 Stock Plan, have the following meanings:

ADMINISTRATOR means the Board of Directors, unless it has delegated power to act on its behalf to the Committee, in which case the Administrator means the Committee.

AFFILIATE means a corporation which, for purposes of Section 424 of the Code, is a parent or subsidiary of the Company, direct or indirect.

AGREEMENT means an agreement between the Company and a Participant delivered pursuant to the Plan, in such form as the Administrator shall approve.

BOARD OF DIRECTORS means the Board of Directors of the Company.

CODE means the United States Internal Revenue Code of 1986, as amended.

COMMITTEE means the committee of the Board of Directors to which the Board of Directors has delegated power to act under or pursuant to the provisions of the Plan.

COMMON STOCK means shares of the Company's common stock, $.01 par value per share.

COMPANY means Metabolix, Inc., a Delaware corporation.

DISABILITY or DISABLED means permanent and total disability as defined in Section 22(e)(3) of the Code.

EMPLOYEE means any employee of the Company or of an Affiliate (including, without limitation, an employee who is also serving as an officer or director of the Company or of an Affiliate), designated by the Administrator to be eligible to be granted one or more Stock Rights under the Plan.

FAIR MARKET VALUE of a Share of Common Stock means:

(1) If the Common Stock is listed on a national securities exchange or traded in the over-the-counter market and sales prices are regularly reported for the

Common Stock, the closing or last price of the Common Stock on the composite tape or other comparable reporting system for the trading day immediately preceding the applicable date and if such date is not a trading day, the last market trading day prior to such date;

(2) If the Common Stock is not traded on a national securities exchange but is traded on the over-the-counter market, if sales prices are not regularly reported for the Common Stock for the trading day referred to in clause (1), and if bid and asked prices for the Common Stock are regularly reported, the mean between the bid and the asked price for the Common Stock at the close of trading in the over-the-counter market for the trading day on which Common Stock was traded immediately preceding the applicable date and if such date is not a trading day, the last market trading day prior to such date; and

(3) If the Common Stock is neither listed on a national securities exchange nor traded in the over-the-counter market, such value as the Administrator, in good faith, shall determine.

ISO means an option meant to qualify as an incentive stock option under Section 422 of the Code.

NON-QUALIFIED OPTION means an option which is not intended to qualify as an ISO.

OPTION means an ISO or Non-Qualified Option granted under the Plan.

PARTICIPANT means an Employee, director or consultant of the Company or an Affiliate to whom one or more Stock Rights are granted under the Plan. As used herein, "Participant" shall include "Participant's Survivors" where the context requires.

PLAN means this Metabolix, Inc. 2005 Stock Plan.

SHARES means shares of the Common Stock as to which Stock Rights have been or may be granted under the Plan or any shares of capital stock into which the Shares are changed or for which they are exchanged within the provisions of Paragraph 3 of the Plan. The Shares issued under the Plan may be authorized and unissued shares or shares held by the Company in its treasury, or both.

STOCK-BASED AWARD means a grant by the Company under the Plan of an equity award or equity based award which is not an Option or Stock Grant.

STOCK GRANT means a grant by the Company of Shares under the Plan.

STOCK RIGHT means a right to Shares or the value of Shares of the Company granted pursuant to the Plan -- an ISO, a Non-Qualified Option, a Stock Grant or a Stock-Based Award.

SURVIVOR means a deceased Participant's legal representatives and/or any person or persons who acquired the Participant's rights to a Stock Right by will or by the laws of descent and distribution.

2. PURPOSES OF THE PLAN.

The Plan is intended to encourage ownership of Shares by Employees and directors of and certain consultants to the Company in order to attract such people, to induce them to work for the benefit of the Company or of an Affiliate and to provide additional incentive for them to promote the success of the Company or of an Affiliate. The Plan provides for the granting of ISOs, Non-Qualified Options, Stock Grants and Stock-Based Awards.

3. SHARES SUBJECT TO THE PLAN.

(a) The number of Shares which may be issued from time to time pursuant to this Plan, shall be 2,250,000 plus the amount of shares of Common Stock, if any, that are presently subject to awards under the Company's 1995 Stock Plan but which become unissued upon the cancellation, surrender or termination of such award for any reason whatsoever or the equivalent of such number of Shares after the Administrator, in its sole discretion, has interpreted the effect of any stock split, stock dividend, combination, recapitalization or similar transaction in accordance with Paragraph 24 of the Plan. Notwithstanding the foregoing, a maximum of 2,250,000 Shares may be issued pursuant to this Plan as Stock Rights, including, but not limited to, ISOs.

(b) If an Option ceases to be outstanding, in whole or in part (other than by exercise), or if the Company shall reacquire (at no more than its original issuance price) any Shares issued pursuant to a Stock Grant or Stock-Based Award, or if any Stock Right expires or is forfeited, cancelled, or otherwise terminated or results in any Shares not being issued, the unissued Shares which were subject to such Stock Right shall again be available for issuance from time to time pursuant to this Plan.

4. ADMINISTRATION OF THE PLAN.

The Administrator of the Plan will be the Board of Directors, except to the extent the Board of Directors delegates its authority to the Committee, in which case the Committee shall be the Administrator. Subject to the provisions of the Plan, the Administrator is authorized to:

a. Interpret the provisions of the Plan and all Stock Rights and to make all rules and determinations which it deems necessary or advisable for the administration of the Plan;

b. Determine which Employees, directors and consultants shall be granted Stock Rights;

c. Determine the number of Shares for which a Stock Right or Stock Rights shall be granted; provided, however, that in no event shall Stock Rights with respect to more than 125,000 Shares be granted to any Participant in any fiscal year;

d. Specify the terms and conditions upon which a Stock Right or Stock Rights may be granted;

e. to make changes to any outstanding Stock Right, including, without limitation, to reduce or increase the exercise price or purchase price, to accelerate the vesting schedule or to extend the expiration date, provided that no such change shall impair the rights of a Participant under any grant previously made without such Participant's consent;

f. to buy out for a payment in cash or Shares, a Stock Right previously granted and/or to cancel any such Stock Right and grant in substitution therefor other Stock Rights, covering the same or a different number of Shares and having an exercise price or purchase price per share which may be lower or higher than the exercise price or purchase price of the cancelled Stock Right, based on such terms and conditions as the Administrator shall establish and the Participant shall accept; and

g. Adopt any sub-plans applicable to residents of any specified jurisdiction as it deems necessary or appropriate in order to comply with or take advantage of any tax or other laws applicable to the Company or to Plan Participants or to otherwise facilitate the administration of the Plan, which sub-plans may include additional restrictions or conditions applicable to Stock Rights or Shares issuable pursuant to a Stock Right;

provided, however, that all such interpretations, rules, determinations, terms and conditions shall be made and prescribed in the context of preserving the tax status under Section 422 of the Code of those Options which are designated as ISOs. Subject to the foregoing, the interpretation and construction by the Administrator of any provisions of the Plan or of any Stock Right granted under it shall be final, unless otherwise determined by the Board of Directors, if the Administrator is the Committee. In addition, if the Administrator is the Committee, the Board of Directors may take any action under the Plan that would otherwise be the responsibility of the Committee.

To the extent permitted under applicable law, the Board of Directors or the Committee may allocate all or any portion of its responsibilities and powers to any one or more of its members and may delegate all or any portion of its responsibilities and powers to any other person selected by it. The Board of Directors or the Committee may revoke any such allocation or delegation at any time.

5. ELIGIBILITY FOR PARTICIPATION.

The Administrator will, in its sole discretion, name the Participants in the Plan, provided, however, that each Participant must be an Employee, director or consultant of the Company or of an Affiliate at the time a Stock Right is granted. Notwithstanding the foregoing, the Administrator may authorize the grant of a Stock Right to a person not then an Employee, director or consultant of the Company or of an Affiliate; provided, however, that the actual grant of such Stock Right shall be conditioned upon such person becoming eligible to become a Participant at or prior to the time of the execution of the Agreement evidencing such Stock Right. ISOs may be granted only to Employees. Non-Qualified Options, Stock Grants and Stock-Based Awards may be granted to any Employee, director or consultant of the Company or an Affiliate. The granting of any Stock Right to any individual shall neither entitle that individual to, nor disqualify him or her from, participation in any other grant of Stock Rights.

6. TERMS AND CONDITIONS OF OPTIONS.

Each Option shall be set forth in writing in an Option Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Administrator may provide that Options be granted subject to such terms and conditions, consistent with the terms and conditions specifically required under this Plan, as the Administrator may deem appropriate including, without limitation, subsequent approval by the shareholders of the Company of this Plan or any amendments thereto. The Option Agreements shall be subject to at least the following terms and conditions:

A. NON-QUALIFIED OPTIONS: Each Option intended to be a Non-Qualified Option shall be subject to the terms and conditions which the

Administrator determines to be appropriate and in the best interest of the Company, subject to the following minimum standards for any such Non-Qualified Option:

a. OPTION PRICE: Each Option Agreement shall state the option price (per share) of the Shares covered by each Option, which option price shall be determined by the Administrator but shall not be less than the Fair Market Value per share of Common Stock.

b. NUMBER OF SHARES: Each Option Agreement shall state the number of Shares to which it pertains.

c. OPTION PERIODS: Each Option Agreement shall state the date or dates on which it first is exercisable and the date after which it may no longer be exercised, and may provide that the Option rights accrue or become exercisable in installments over a period of months or years, or upon the occurrence of certain conditions or the attainment of stated goals or events.

d. OPTION CONDITIONS: Exercise of any Option may be conditioned upon the Participant's execution of a Share purchase agreement in form satisfactory to the Administrator providing for certain protections for the Company and its other shareholders, including requirements that:

i. The Participant's or the Participant's Survivors' right to sell or transfer the Shares may be restricted; and

ii. The Participant or the Participant's Survivors may be required to execute letters of investment intent and must also acknowledge that the Shares will bear legends noting any applicable restrictions.

B. ISOs: Each Option intended to be an ISO shall be issued only to an Employee and be subject to the following terms and conditions, with such additional restrictions or changes as the Administrator determines are appropriate but not in conflict with Section 422 of the Code and relevant regulations and rulings of the Internal Revenue Service:

a. MINIMUM STANDARDS: The ISO shall meet the minimum standards required of Non-Qualified Options, as described in Paragraph 6(A) above, except clause (a) thereunder.

b. OPTION PRICE: Immediately before the ISO is granted, if the Participant owns, directly or by reason of the applicable attribution rules in Section 424(d) of the Code:

i. 10% OR LESS of the total combined voting power of all classes of stock of the Company or an Affiliate, the Option price per share of the Shares covered by each ISO shall not be less than 100% of the Fair Market Value per share of the Shares on the date of the grant of the Option; or

ii. More than 10% of the total combined voting power of all classes of stock of the Company or an Affiliate, the Option price per share of the Shares covered by each ISO shall not be less than 110% of the Fair Market Value on the date of grant.

c. TERM OF OPTION: For Participants who own:

i. 10% OR LESS of the total combined voting power of all classes of stock of the Company or an Affiliate, each ISO shall terminate not more than ten years from the date of the grant or at such earlier time as the Option Agreement may provide; or

ii. More than 10% of the total combined voting power of all classes of stock of the Company or an Affiliate, each ISO shall terminate not

more than five years from the date of the grant or at such earlier time as the Option Agreement may provide.

d. LIMITATION ON YEARLY EXERCISE: The Option Agreements shall restrict the amount of ISOs which may become exercisable in any calendar year (under this or any other ISO plan of the Company or an Affiliate) so

that the aggregate Fair Market Value (determined at the time each ISO is granted) of the stock with respect to which ISOs are exercisable for the first time by the Participant in any calendar year does not exceed $100,000.

7. TERMS AND CONDITIONS OF STOCK GRANTS.

Each offer of a Stock Grant to a Participant shall state the date prior to which the Stock Grant must be accepted by the Participant, and the principal terms of each Stock Grant shall be set forth in an Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Agreement shall be in a form approved by the Administrator and shall contain terms and conditions which the Administrator determines to be appropriate and in the best interest of the Company, subject to the following minimum standards:

(a) Each Agreement shall state the purchase price (per share), if any, of the Shares covered by each Stock Grant, which purchase price shall be determined by the Administrator but shall not be less than the minimum consideration required by the Delaware General Corporation Law on the date of the grant of the Stock Grant;

(b) Each Agreement shall state the number of Shares to which the Stock Grant pertains; and

(c) Each Agreement shall include the terms of any right of the Company to restrict or reacquire the Shares subject to the Stock Grant, including the time and events upon which such rights shall accrue and the purchase price therefor, if any.

8. TERMS AND CONDITIONS OF OTHER STOCK-BASED AWARDS.

The Board shall have the right to grant other Stock-Based Awards based upon the Common Stock having such terms and conditions as the Board may determine, including, without limitation, the grant of Shares based upon certain conditions, the grant of securities convertible into Shares and the grant of stock appreciation rights, phantom stock awards or stock units. The principal terms of each Stock-Based Award shall be set forth in an Agreement, duly executed by the Company and, to the extent required by law or requested by the Company, by the Participant. The Agreement shall be in a form approved by the Administrator and shall

contain terms and conditions which the Administrator determines to be appropriate and in the best interest of the Company.

9. EXERCISE OF OPTIONS AND ISSUE OF SHARES.

An Option (or any part or installment thereof) shall be exercised by giving written notice to the Company or its designee, together with provision for payment of the full purchase price in accordance with this Paragraph for the Shares as to which the Option is being exercised, and upon compliance with any other condition(s) set forth in the Option Agreement. Such notice shall be signed by the person exercising the Option, shall state the number of Shares with respect to which the Option is being exercised and shall contain any representation required by the Plan or the Option Agreement. Payment of the purchase price for the Shares as to which such Option is being exercised shall be made (a) in United States dollars in cash or by check, or (b) at the discretion of the Administrator, through delivery of shares of Common Stock having a Fair Market Value equal as of the date of the exercise to the cash exercise price of the Option, or (c) at the discretion of the Administrator, by having the Company retain from the shares otherwise issuable upon exercise of the Option, a number of shares having a Fair Market Value equal as of the date of exercise to the exercise price of the Option, or (d) at the discretion of the Administrator, by delivery of the grantee's personal recourse note, bearing interest payable not less than annually at no less than 100% of the applicable Federal rate, as defined in Section 1274(d) of the Code, with or without the pledge of such Shares as collateral, or (e) at the discretion of the Administrator, in accordance with a cashless exercise program established with a securities brokerage firm, and approved by the Administrator, or (f) at the discretion of the Administrator, by any combination of (a), (b), (c), (d) and (e) above, or (g) at the discretion of the Administrator, payment of such other lawful consideration as the Board may determine. Notwithstanding the foregoing, the Administrator shall accept only such payment on exercise of an ISO as is permitted by Section 422 of the Code.

The Company shall then reasonably promptly deliver the Shares as to which such Option was exercised to the Participant (or to the Participant's Survivors, as the case may be). In determining what constitutes "reasonably promptly," it

is expressly understood that the issuance and delivery of the Shares may be delayed by the Company in order to comply with any law or regulation (including, without limitation, state securities or "blue sky" laws) which requires the Company to take any action with respect to the Shares prior to their issuance. The Shares shall, upon delivery, be fully paid, non-assessable Shares.

The Administrator shall have the right to accelerate the date of exercise of any installment of any Option; provided that the Administrator shall not accelerate the exercise date of any installment of any Option granted to an Employee as an ISO (and not previously converted into a Non-Qualified Option pursuant to Paragraph 27) if such acceleration would violate the annual vesting limitation contained in Section 422(d) of the Code, as described in Paragraph 6.B.d.

The Administrator may, in its discretion, amend any term or condition of an outstanding Option provided (i) such term or condition as amended is permitted by the Plan, (ii) any such

amendment shall be made only with the consent of the Participant to whom the Option was granted, or in the event of the death of the Participant, the Participant's Survivors, if the amendment is adverse to the Participant, and (iii) any such amendment of any ISO shall be made only after the Administrator determines whether such amendment would constitute a "modification" of any Option which is an ISO (as that term is defined in Section 424(h) of the Code) or would cause any adverse tax consequences for the holder of such ISO.

10. ACCEPTANCE OF STOCK GRANTS AND STOCK-BASED AWARDS AND ISSUE OF SHARES.

A Stock Grant or Stock-Based Award (or any part or installment thereof) shall be accepted by executing the applicable Agreement and delivering it to the Company or its designee, together with provision for payment of the full purchase price, if any, in accordance with this Paragraph for the Shares as to which such Stock Grant or Stock-Based Award is being accepted, and upon compliance with any other conditions set forth in the applicable Agreement. Payment of the purchase price for the Shares as to which such Stock Grant or Stock-Based Award is being accepted shall be made (a) in United States dollars in cash or by check, or (b) at the discretion of the Administrator, through delivery of shares of Common Stock having a Fair Market Value equal as of the date of acceptance of the Stock Grant or Stock-Based Award to the purchase price of the Stock Grant or Stock-Based Award, or (c) at the discretion of the Administrator, by delivery of the grantee's personal recourse note bearing interest payable not less than annually at no less than 100% of the applicable Federal rate, as defined in Section 1274(d) of the Code, or (d) at the discretion of the Administrator, by any combination of (a), (b) and (c) above.

The Company shall then, if required pursuant to the applicable Agreement, reasonably promptly deliver the Shares as to which such Stock Grant or Stock-Based Award was accepted to the Participant (or to the Participant's Survivors, as the case may be), subject to any escrow provision set forth in the applicable Agreement. In determining what constitutes "reasonably promptly," it is expressly understood that the issuance and delivery of the Shares may be delayed by the Company in order to comply with any law or regulation (including, without limitation, state securities or "blue sky" laws) which requires the Company to take any action with respect to the Shares prior to their issuance.

The Administrator may, in its discretion, amend any term or condition of an outstanding Stock Grant, Stock-Based Award or applicable Agreement provided (i) such term or condition as amended is permitted by the Plan, and (ii) any such amendment shall be made only with the consent of the Participant to whom the Stock Grant or Stock-Based Award was made, if the amendment is adverse to the Participant.

11. RIGHTS AS A SHAREHOLDER.

No Participant to whom a Stock Right has been granted shall have rights as a shareholder with respect to any Shares covered by such Stock Right, except after due exercise of the Option

or acceptance of the Stock Grant or as set forth in any Agreement and tender of the full purchase price, if any, for the Shares being purchased pursuant to such exercise or acceptance and registration of the Shares in the Company's share register in the name of the Participant.

12. ASSIGNABILITY AND TRANSFERABILITY OF STOCK RIGHTS.

By its terms, a Stock Right granted to a Participant shall not be transferable by the Participant other than (i) by will or by the laws of descent and distribution, or (ii) as approved by the Administrator in its discretion and set forth in the applicable Agreement. Notwithstanding the foregoing, an ISO transferred except in compliance with clause (i) above shall no longer qualify as an ISO. The designation of a beneficiary of a Stock Right by a Participant, with the prior approval of the Administrator and in such form as the Administrator shall prescribe, shall not be deemed a transfer prohibited by this Paragraph. Except as provided above, a Stock Right shall only be exercisable or may only be accepted, during the Participant's lifetime, by such Participant (or by his or her legal representative) and shall not be assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted transfer, assignment, pledge, hypothecation or other disposition of any Stock Right or of any rights granted thereunder contrary to the provisions of this Plan, or the levy of any attachment or similar process upon a Stock Right, shall be null and void.

13. EFFECT ON OPTIONS OF TERMINATION OF SERVICE OTHER THAN "FOR CAUSE" OR DEATH OR DISABILITY.

Except as otherwise provided in a Participant's Option Agreement, in the event of a termination of service (whether as an employee, director or consultant) with the Company or an Affiliate before the Participant has exercised an Option, the following rules apply:

a. A Participant who ceases to be an employee, director or consultant of the Company or of an Affiliate (for any reason other than termination "for cause", Disability, or death for which events there are special rules in Paragraphs 14, 15, and 16, respectively), may exercise any Option granted to him or her to the extent that the Option is exercisable on the date of such termination of service, but only within such term as the Administrator has designated in a Participant's Option Agreement.

b. Except as provided in Subparagraph (c) below, or Paragraph 15 or 16, in no event may an Option intended to be an ISO, be exercised later than three months after the Participant's termination of employment.

c. The provisions of this Paragraph, and not the provisions of Paragraph 15 or 16, shall apply to a Participant who subsequently becomes Disabled or dies after the termination of employment, director status or consultancy; provided, however, in the case of a Participant's Disability or death within three months after the

termination of employment, director status or consultancy, the Participant or the Participant's Survivors may exercise the Option within one year after the date of the Participant's termination of service, but in no event after the date of expiration of the term of the Option.

d. Notwithstanding anything herein to the contrary, if subsequent to a Participant's termination of employment, termination of director status or termination of consultancy, but prior to the exercise of an Option, the Board of Directors determines that, either prior or subsequent to the Participant's termination, the Participant engaged in conduct which would constitute "cause", then such Participant shall forthwith cease to have any right to exercise any Option.

e. A Participant to whom an Option has been granted under the Plan who is absent from the Company or an Affiliate because of temporary disability (any disability other than a Disability as defined in Paragraph 1 hereof), or who is on leave of absence for any purpose, shall not, during the period of any such absence, be deemed, by virtue of such absence alone, to have terminated such Participant's employment, director status or consultancy with the Company or with an Affiliate, except as the Administrator may otherwise expressly provide.

f. Except as required by law or as set forth in a Participant's Option Agreement, Options granted under the Plan shall not be affected by any change of a Participant's status within or among the Company and any Affiliates, so long as the Participant continues to be an employee, director or consultant of the Company or any Affiliate.

14. EFFECT ON OPTIONS OF TERMINATION OF SERVICE "FOR CAUSE".

Except as otherwise provided in a Participant's Option Agreement, the

following rules apply if the Participant's service (whether as an employee, director or consultant) with the Company or an Affiliate is terminated "for cause" prior to the time that all his or her outstanding Options have been exercised:

a. All outstanding and unexercised Options as of the time the Participant is notified his or her service is terminated "for cause" will immediately be forfeited.

b. For purposes of this Plan, "cause" shall include (and is not limited to) dishonesty with respect to the Company or any Affiliate, insubordination, substantial malfeasance or non-feasance of duty, unauthorized disclosure of confidential information, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or similar agreement between the Participant and the Company, and conduct substantially prejudicial to the business of the Company or any Affiliate. The determination of the Administrator as to the existence of "cause" will be conclusive on the Participant and the Company.

c. "Cause" is not limited to events which have occurred prior to a Participant's termination of service, nor is it necessary that the Administrator's finding of "cause" occur prior to termination. If the Administrator determines, subsequent to a Participant's termination of service but prior to the exercise of an Option, that either prior or subsequent to the Participant's termination the Participant engaged in conduct which would constitute "cause", then the right to exercise any Option is forfeited.

d. Any provision in an agreement between the Participant and the Company or an Affiliate, which contains a conflicting definition of "cause" for termination and which is in effect at the time of such termination, shall supersede the definition in this Plan with respect to that Participant.

15. EFFECT ON OPTIONS OF TERMINATION OF SERVICE FOR DISABILITY.

Except as otherwise provided in a Participant's Option Agreement, a Participant who ceases to be an employee, director or consultant of the Company or of an Affiliate by reason of Disability may exercise any Option granted to such Participant:

a. To the extent that the Option has become exercisable but has not been exercised on the date of Disability; and

b. In the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of Disability of any additional vesting rights that would have accrued on the next vesting date had the Participant not become Disabled. The proration shall be based upon the number of days accrued in the current vesting period prior to the date of Disability.

A Disabled Participant may exercise such rights only within the period ending one year after the date of the Participant's termination of employment, directorship or consultancy, as the case may be, notwithstanding that the Participant might have been able to exercise the Option as to some or all of the Shares on a later date if the Participant had not become Disabled and had continued to be an employee, director or consultant or, if earlier, within the originally prescribed term of the Option.

The Administrator shall make the determination both of whether Disability has occurred and the date of its occurrence (unless a procedure for such determination is set forth in another agreement between the Company and such Participant, in which case such procedure shall be used for such determination). If requested, the Participant shall be examined by a physician selected or approved by the Administrator, the cost of which examination shall be paid for by the Company.

16. EFFECT ON OPTIONS OF DEATH WHILE AN EMPLOYEE, DIRECTOR OR CONSULTANT.

Except as otherwise provided in a Participant's Option Agreement, in the event of the death of a Participant while the Participant is an employee, director or consultant of the Company or of an Affiliate, such Option may be exercised by the Participant's Survivors:

a. To the extent that the Option has become exercisable but has not been exercised on the date of death; and

b. In the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of death of any additional vesting rights that would have accrued on the next vesting date had the Participant not died. The proration shall be based upon the number of days accrued in the current vesting period prior to the Participant's date of death.

If the Participant's Survivors wish to exercise the Option, they must take all necessary steps to exercise the Option within one year after the date of death of such Participant, notwithstanding that the decedent might have been able to exercise the Option as to some or all of the Shares on a later date if he or she had not died and had continued to be an employee, director or consultant or, if earlier, within the originally prescribed term of the Option.

17. EFFECT OF TERMINATION OF SERVICE ON UNACCEPTED STOCK GRANTS.

In the event of a termination of service (whether as an employee, director or consultant) with the Company or an Affiliate for any reason before the Participant has accepted a Stock Grant, such offer shall terminate.

For purposes of this Paragraph 17 and Paragraph 18 below, a Participant to whom a Stock Grant has been offered and accepted under the Plan who is absent from work with the Company or with an Affiliate because of temporary disability (any disability other than a permanent and total Disability as defined in Paragraph 1 hereof), or who is on leave of absence for any purpose, shall not, during the period of any such absence, be deemed, by virtue of such absence alone, to have terminated such Participant's employment, director status or consultancy with the Company or with an Affiliate, except as the Administrator may otherwise expressly provide.

In addition, for purposes of this Paragraph 17 and Paragraph 18 below, any change of employment or other service within or among the Company and any Affiliates shall not be treated as a termination of employment, director status or consultancy so long as the Participant continues to be an employee, director or consultant of the Company or any Affiliate.

18. EFFECT ON STOCK GRANTS OF TERMINATION OF SERVICE OTHER THAN "FOR CAUSE" OR DEATH OR DISABILITY.

Except as otherwise provided in a Participant's Agreement, in the event of a termination of service (whether as an employee, director or consultant), other than termination "for cause," Disability, or death for which events there are special rules in Paragraphs 19, 20, and 21, respectively, before all Company rights of repurchase shall have lapsed, then the Company shall have the right to repurchase that number of Shares subject to a Stock Grant as to which the Company's repurchase rights have not lapsed.

19. EFFECT ON STOCK GRANTS OF TERMINATION OF SERVICE "FOR CAUSE".

Except as otherwise provided in a Participant's Agreement, the following rules apply if the Participant's service (whether as an employee, director or consultant) with the Company or an Affiliate is terminated "for cause":

a. All Shares subject to any Stock Grant shall be immediately subject to repurchase by the Company at the purchase price, if any, thereof.

b. For purposes of this Plan, "cause" shall include (and is not limited to) dishonesty with respect to the employer, insubordination, substantial malfeasance or non-feasance of duty, unauthorized disclosure of confidential information, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or similar agreement between the Participant and the Company, and conduct substantially prejudicial to the business of the Company or any Affiliate. The determination of the Administrator as to the existence of "cause" will be conclusive on the Participant and the Company.

c. "Cause" is not limited to events which have occurred prior to a Participant's termination of service, nor is it necessary that the Administrator's finding of "cause" occur prior to termination. If the Administrator determines, subsequent to a Participant's termination of service, that either prior or subsequent to the Participant's termination the Participant engaged in conduct which would constitute "cause," then the Company's right to repurchase all of such Participant's Shares shall apply.

d. Any provision in an agreement between the Participant and the Company or an Affiliate, which contains a conflicting definition of "cause" for termination and which is in effect at the time of such termination, shall supersede the definition in this Plan with respect to that Participant.

20. EFFECT ON STOCK GRANTS OF TERMINATION OF SERVICE FOR DISABILITY.

Except as otherwise provided in a Participant's Agreement, the following rules apply if a Participant ceases to be an employee, director or consultant of the Company or of an Affiliate by reason of Disability: to the extent the Company's rights of repurchase have not lapsed on the date of Disability, they shall be exercisable; provided, however, that in the event such rights of repurchase lapse periodically, such rights shall lapse to the extent of a pro rata portion of the Shares subject to such Stock Grant through the date of Disability as would have lapsed had the Participant not become Disabled. The proration shall be based upon the number of days accrued prior to the date of Disability.

The Administrator shall make the determination both of whether Disability has occurred and the date of its occurrence (unless a procedure for such determination is set forth in another agreement between the Company and such Participant, in which case such procedure shall be used for such determination). If requested, the Participant shall be examined by a physician selected or approved by the Administrator, the cost of which examination shall be paid for by the Company.

21. EFFECT ON STOCK GRANTS OF DEATH WHILE AN EMPLOYEE, DIRECTOR OR CONSULTANT.

Except as otherwise provided in a Participant's Agreement, the following rules apply in the event of the death of a Participant while the Participant is an employee, director or consultant of the Company or of an Affiliate: to the extent the Company's rights of repurchase have not lapsed on the date of death, they shall be exercisable; provided, however, that in the event such rights of repurchase lapse periodically, such rights shall lapse to the extent of a pro rata portion of the Shares subject to such Stock Grant through the date of death as would have lapsed had the Participant not died. The proration shall be based upon the number of days accrued prior to the Participant's death.

22. PURCHASE FOR INVESTMENT.

Unless the offering and sale of the Shares to be issued upon the particular exercise or acceptance of a Stock Right shall have been effectively registered under the Securities Act of 1933, as now in force or hereafter amended (the "1933 Act"), the Company shall be under no obligation to issue the Shares covered by such exercise unless and until the following conditions have been fulfilled:

a. The person(s) who exercise(s) or accept(s) such Stock Right shall warrant to the Company, prior to the receipt of such Shares, that such person(s) are acquiring such Shares for their own respective accounts, for investment, and not with a view to, or for sale in connection with, the distribution of any such Shares, in which event the person(s) acquiring such Shares shall be bound by the provisions of the

following legend which shall be endorsed upon the certificate(s) evidencing their Shares issued pursuant to such exercise or such grant:

> "The shares represented by this certificate have been taken for investment and they may not be sold or otherwise transferred by any person, including a pledgee, unless (1) either (a) a Registration Statement with respect to such shares shall be effective under the Securities Act of 1933, as amended, or (b) the Company shall have received an opinion of counsel satisfactory to it that an exemption from registration under such Act is then available, and (2) there shall have been compliance with all applicable state securities laws."

b. At the discretion of the Administrator, the Company shall have received an opinion of its counsel that the Shares may be issued upon such particular exercise or acceptance in compliance with the 1933 Act without registration thereunder.

23. DISSOLUTION OR LIQUIDATION OF THE COMPANY.

Upon the dissolution or liquidation of the Company, all Options granted under this Plan which as of such date shall not have been exercised and all Stock Grants and Stock-Based Awards which have not been accepted will terminate and become null and void; provided, however, that if the rights of a Participant or a Participant's Survivors have not otherwise terminated and expired, the Participant or the Participant's Survivors will have the right immediately prior to such dissolution or liquidation to exercise or accept any Stock Right to the extent that the Stock Right is exercisable or subject to acceptance as of the date immediately prior to such dissolution or liquidation. Upon the dissolution or liquidation of the Company, any outstanding Stock-Based Awards shall immediately terminate unless otherwise determined by the Administrator or specifically provided in the applicable Agreement.

24. ADJUSTMENTS.

Upon the occurrence of any of the following events, a Participant's rights with respect to any Stock Right granted to him or her hereunder shall be adjusted as hereinafter provided, unless otherwise specifically provided in a Participant's Agreement:

A. STOCK DIVIDENDS AND STOCK SPLITS. If (i) the shares of Common Stock shall be subdivided or combined into a greater or smaller number of shares or if the Company shall issue any shares of Common Stock as a stock dividend on its outstanding Common Stock, or (ii) additional shares or new or different shares or other securities of the Company or other non-cash assets are distributed with respect to such shares of Common Stock, the number of shares of Common Stock deliverable upon the exercise of an Option or acceptance of a Stock Grant may be appropriately increased or decreased proportionately, and appropriate adjustments may be made including, in the purchase price per share, to reflect such events. The number of Shares

subject to the limitation in Paragraphs 3 and 4(c) shall also be proportionately adjusted upon the occurrence of such events.

B. CORPORATE TRANSACTIONS. If the Company is to be consolidated with or acquired by another entity in a merger, sale of all or substantially all of the Company's assets other than a transaction to merely change the state of incorporation (a "Corporate Transaction"), the Administrator or the board of directors of any entity assuming the obligations of the Company hereunder (the "Successor Board"), shall, as to outstanding Options, either (i) make appropriate provision for the continuation of such Options by substituting on an equitable basis for the Shares then subject to such Options either the consideration payable with respect to the outstanding shares of Common Stock in connection with the Corporate Transaction or securities of any successor or acquiring entity; or (ii) upon written notice to the Participants, provide that all Options must be exercised (either (a) to the extent then exercisable or, (b) at the discretion of the Administrator, all Options being made fully exercisable for purposes of this Subparagraph), within a specified number of days of the date of such notice, at the end of which period the Options shall terminate; or (iii) terminate all Options in exchange for a cash payment equal to the excess of the Fair Market Value of the Shares subject to such Options (either (a) to the extent then exercisable or, (b) at the discretion of the Administrator, all Options being made fully exercisable for purposes of this Subparagraph) over the exercise price thereof.

With respect to outstanding Stock Grants, the Administrator or the Successor Board, shall either (i) make appropriate provisions for the continuation of such Stock Grants by substituting on an equitable basis for the Shares then subject to such Stock Grants either the consideration payable with respect to the outstanding Shares of Common Stock in connection with the Corporate Transaction or securities of any successor or acquiring entity; or (ii) upon written notice to the Participants, provide that all Stock Grants must be accepted (to the extent then subject to acceptance) within a specified number of days of the date of such notice, at the end of which period the offer of the Stock Grants shall terminate; or (iii) terminate all Stock Grants in exchange for a cash payment equal to the excess of the Fair Market Value of the Shares subject to such Stock Grants over the purchase price thereof, if any. In addition, in the event of a Corporate Transaction, the Administrator may waive any or all Company repurchase rights with respect to outstanding Stock Grants.

C. RECAPITALIZATION OR REORGANIZATION. In the event of a recapitalization or reorganization of the Company, other than a Corporate Transaction pursuant to which securities of the Company or of another corporation are issued with respect to the outstanding shares of Common Stock, a Participant upon exercising an Option or accepting a Stock Grant after the recapitalization or

reorganization shall be entitled to receive for the purchase price paid upon such exercise or acceptance the number of replacement securities which would have been received if such Option had been exercised or Stock Grant accepted prior to such recapitalization or reorganization.

D. ADJUSTMENTS TO STOCK-BASED AWARDS. Upon the happening of any of the events described in Subparagraphs A, B or C above, any outstanding Stock-Based Award shall be appropriately adjusted to reflect the events described in such Subparagraphs. The Administrator

or the Successor Board shall determine the specific adjustments to be made under this Paragraph 24 and, subject to Paragraph 4, its determination shall be conclusive.

E. MODIFICATION OF ISOs. Notwithstanding the foregoing, any adjustments made pursuant to Subparagraph A, B or C above with respect to ISOs shall be made only after the Administrator determines whether such adjustments would constitute a "modification" of such ISOs (as that term is defined in Section 424(h) of the Code) or would cause any adverse tax consequences for the holders of such ISOs. If the Administrator determines that such adjustments made with respect to ISOs would constitute a modification of such ISOs, it may refrain from making such adjustments, unless the holder of an ISO specifically requests in writing that such adjustment be made and such writing indicates that the holder has full knowledge of the consequences of such "modification" on his or her income tax treatment with respect to the ISO.

25. ISSUANCES OF SECURITIES.

Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares subject to Stock Rights. Except as expressly provided herein, no adjustments shall be made for dividends paid in cash or in property (including without limitation, securities) of the Company prior to any issuance of Shares pursuant to a Stock Right.

26. FRACTIONAL SHARES.

No fractional shares shall be issued under the Plan and the person exercising a Stock Right shall receive from the Company cash in lieu of such fractional shares equal to the Fair Market Value thereof.

27. CONVERSION OF ISOs INTO NON-QUALIFIED OPTIONS; TERMINATION OF ISOs.

The Administrator, at the written request of any Participant, may in its discretion take such actions as may be necessary to convert such Participant's ISOs (or any portions thereof) that have not been exercised on the date of conversion into Non-Qualified Options at any time prior to the expiration of such ISOs, regardless of whether the Participant is an employee of the Company or an Affiliate at the time of such conversion. At the time of such conversion, the Administrator (with the consent of the Participant) may impose such conditions on the exercise of the resulting Non-Qualified Options as the Administrator in its discretion may determine, provided that such conditions shall not be inconsistent with this Plan. Nothing in the Plan shall be deemed to give any Participant the right to have such Participant's ISOs converted into Non-Qualified Options, and no such conversion shall occur until and unless the Administrator

takes appropriate action. The Administrator, with the consent of the Participant, may also terminate any portion of any ISO that has not been exercised at the time of such conversion.

28. WITHHOLDING.

In the event that any federal, state, or local income taxes, employment taxes, Federal Insurance Contributions Act ("F.I.C.A.") withholdings or other amounts are required by applicable law or governmental regulation to be withheld from the Participant's salary, wages or other remuneration in connection with the exercise or acceptance of a Stock Right or in connection with a Disqualifying Disposition (as defined in Paragraph 29) or upon the lapsing of any right of repurchase, the Company may withhold from the Participant's compensation, if any, or may require that the Participant advance in cash to the Company, or to any Affiliate of the Company which employs or employed the Participant, the statutory minimum amount of such withholdings unless a different withholding arrangement, including the use of shares of the Company's

Common Stock or a promissory note, is authorized by the Administrator (and permitted by law). For purposes hereof, the fair market value of the shares withheld for purposes of payroll withholding shall be determined in the manner provided in Paragraph 1 above, as of the most recent practicable date prior to the date of exercise. If the fair market value of the shares withheld is less than the amount of payroll withholdings required, the Participant may be required to advance the difference in cash to the Company or the Affiliate employer. The Administrator in its discretion may condition the exercise of an Option for less than the then Fair Market Value on the Participant's payment of such additional withholding.

29. NOTICE TO COMPANY OF DISQUALIFYING DISPOSITION.

Each Employee who receives an ISO must agree to notify the Company in writing immediately after the Employee makes a Disqualifying Disposition of any shares acquired pursuant to the exercise of an ISO. A Disqualifying Disposition is defined in Section 424(c) of the Code and includes any disposition (including any sale or gift) of such shares before the later of (a) two years after the date the Employee was granted the ISO, or (b) one year after the date the Employee acquired Shares by exercising the ISO, except as otherwise provided in Section 424(c) of the Code. If the Employee has died before such stock is sold, these holding period requirements do not apply and no Disqualifying Disposition can occur thereafter.

30. TERMINATION OF THE PLAN.

The Plan will terminate on June 1, 2015, the date which is ten years from the EARLIER of the date of its adoption by the Board of Directors and the date of its approval by the shareholders of the Company. The Plan may be terminated at an earlier date by vote of the shareholders or the Board of Directors of the Company; provided, however, that any such earlier termination shall not affect any Agreements executed prior to the effective date of such termination.

31. AMENDMENT OF THE PLAN AND AGREEMENTS.

The Plan may be amended by the shareholders of the Company. The Plan may also be amended by the Administrator, including, without limitation, to the extent necessary to qualify any or all outstanding Stock Rights granted under the Plan or Stock Rights to be granted under the Plan for favorable federal income tax treatment (including deferral of taxation upon exercise) as may be afforded incentive stock options under Section 422 of the Code, and to the extent necessary to qualify the shares issuable upon exercise or acceptance of any outstanding Stock Rights granted, or Stock Rights to be granted, under the Plan for listing on any national securities exchange or quotation in any national automated quotation system of securities dealers. Any amendment approved by the Administrator which the Administrator determines is of a scope that requires shareholder approval shall be subject to obtaining such shareholder approval. Any modification or amendment of the Plan shall not, without the consent of a Participant, adversely affect his or her rights under a Stock Right previously granted to him or her. With the consent of the Participant affected, the Administrator may amend outstanding Agreements in a manner which may be adverse to the Participant but which is not inconsistent with the Plan. In the discretion of the Administrator, outstanding Agreements may be amended by the Administrator in a manner which is not adverse to the Participant.

32. EMPLOYMENT OR OTHER RELATIONSHIP.

Nothing in this Plan or any Agreement shall be deemed to prevent the Company or an Affiliate from terminating the employment, consultancy or director status of a Participant, nor to prevent a Participant from terminating his or her own employment, consultancy or director status or to give any Participant a right to be retained in employment or other service by the Company or any Affiliate for any period of time.

33. GOVERNING LAW.

This Plan shall be construed and enforced in accordance with the law of the State of Delaware.

Exhibit 10.2.1

INCENTIVE STOCK OPTION AGREEMENT

METABOLIX, INC.

AGREEMENT made as of the _____, ___ 200_, between Metabolix, Inc. (the "Company"), a Delaware corporation, and _____, an employee of the Company (the "Employee").

WHEREAS, the Company desires to grant to the Employee an Option to purchase shares of its common stock, $.01 par value per share (the "Shares"), under and for the purposes set forth in the Company's 2005 Stock Plan (the "Plan");

WHEREAS, the Company and the Employee understand and agree that any terms used and not defined herein have the same meanings as in the Plan; and

WHEREAS, the Company and the Employee each intend that the Option granted herein qualify as an ISO.

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth and for other good and valuable consideration, the parties hereto agree as follows:

1. GRANT OF OPTION.

The Company hereby grants to the Employee the right and option to purchase all or any part of an aggregate of _____ Shares, on the terms and conditions and subject to all the limitations set forth herein, under United States securities and tax laws, and in the Plan, which is incorporated herein by reference. The Employee acknowledges receipt of a copy of the Plan.

2. PURCHASE PRICE.

The purchase price of the Shares covered by the Option shall be $_____ per Share, subject to adjustment, as provided in the Plan, in the event of a stock split, reverse stock split or other events affecting the holders of Shares (the "Purchase Price"). Payment shall be made in accordance with Paragraph 9 of the Plan.

3. EXERCISABILITY OF OPTION.

Subject to the terms and conditions set forth in this Agreement and the Plan, the Option granted hereby shall become exercisable as follows:

[TO BE COMPLETED BY COMPANY FOR EACH EMPLOYEE]

The foregoing rights are cumulative and are subject to the other terms and conditions of this Agreement and the Plan.

4. TERM OF OPTION.

The Option shall terminate ten years from the date of this Agreement or, if the Employee owns as of the date hereof more than 10% of the total combined voting power of all classes of capital stock of the Company or an Affiliate, five years from the date of this Agreement, but shall be subject to earlier termination as provided herein or in the Plan.

If the Employee ceases to be an employee of the Company or of an Affiliate (for any reason other than the death or Disability of the Employee or termination of the Employee's employment for "cause" (as defined in the Plan)), the Option may be exercised, if it has not previously terminated, within three months after the date the Employee ceases to be an employee of the Company or an Affiliate, or within the originally prescribed term of the Option, whichever is earlier, but may not be exercised thereafter. In such event, the Option shall be exercisable only to the extent that the Option has become exercisable and is in effect at the date of such cessation of employment.

Notwithstanding the foregoing, in the event of the Employee's Disability or death within three months after the termination of employment, the Employee or the Employee's Survivors may exercise the Option within one year after the date of the Employee's termination of employment, but in no event after the date of expiration of the term of the Option.

In the event the Employee's employment is terminated by the Employee's employer for "cause" (as defined in the Plan), the Employee's right to exercise

any unexercised portion of this Option shall cease immediately as of the time the Employee is notified his or her employment is terminated for "cause," and this Option shall thereupon terminate. Notwithstanding anything herein to the contrary, if subsequent to the Employee's termination as an employee, but prior to the exercise of the Option, the Board of Directors of the Company determines that, either prior or subsequent to the Employee's termination, the Employee engaged in conduct which would constitute "cause," then the Employee shall immediately cease to have any right to exercise the Option and this Option shall thereupon terminate.

In the event of the Disability of the Employee, as determined in accordance with the Plan, the Option shall be exercisable within one year after the Employee's termination of employment

or, if earlier, within the term originally prescribed by the Option. In such event, the Option shall be exercisable:

(a) to the extent that the Option has become exercisable but has not been exercised as of the date of Disability; and

(b) in the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of Disability of any additional vesting rights that would have accrued on the next vesting date had the Employee not become Disabled. The proration shall be based upon the number of days accrued in the current vesting period prior to the date of Disability.

In the event of the death of the Employee while an employee of the Company or of an Affiliate, the Option shall be exercisable by the Employee's Survivors within one year after the date of death of the Employee or, if earlier, within the originally prescribed term of the Option. In such event, the Option shall be exercisable:

(x) to the extent that the Option has become exercisable but has not been exercised as of the date of death; and

(y) in the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of death of any additional vesting rights that would have accrued on the next vesting date had the Employee not died. The proration shall be based upon the number of days accrued in the current vesting period prior to the Employee's date of death.

5. METHOD OF EXERCISING OPTION.

Subject to the terms and conditions of this Agreement, the Option may be exercised by written notice to the Company or its designee, in substantially the form of EXHIBIT A attached hereto. Such notice shall state the number of Shares with respect to which the Option is being exercised and shall be signed by the person exercising the Option. Payment of the purchase price for such Shares shall be made in accordance with Paragraph 9 of the Plan. The Company shall deliver such Shares as soon as practicable after the notice shall be received, provided, however, that the Company may delay issuance of such Shares until completion of any action or obtaining of any consent, which the Company deems necessary under any applicable law (including, without limitation, state securities or "blue sky" laws). The Shares as to which the Option shall have been so exercised shall be registered in the Company's share register in the name of the person so exercising the Option (or, if the Option shall be exercised by the Employee and if the Employee shall so request in the notice exercising the Option, shall be registered in the Company's share register in the name of the Employee and another person jointly, with right of survivorship) and shall be delivered as provided above to or upon the written order of the person exercising the Option. In the event the Option shall be exercised, pursuant to Section 4 hereof, by any person other than the Employee, such notice shall be accompanied by appropriate proof of the right of such person to exercise the Option. All Shares

that shall be purchased upon the exercise of the Option as provided herein shall be fully paid and nonassessable.

6. PARTIAL EXERCISE.

Exercise of this Option to the extent above stated may be made in part at any time and from time to time within the above limits, except that no fractional share shall be issued pursuant to this Option.

7. NON-ASSIGNABILITY.

The Option shall not be transferable by the Employee otherwise than by will or by the laws of descent and distribution. The Option shall be exercisable, during the Employee's lifetime, only by the Employee (or, in the event of legal incapacity or incompetency, by the Employee's guardian or representative) and shall not be assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted transfer, assignment, pledge, hypothecation or other disposition of the Option or of any rights granted hereunder contrary to the provisions of this Section 7, or the levy of any attachment or similar process upon the Option shall be null and void.

8. NO RIGHTS AS STOCKHOLDER UNTIL EXERCISE.

The Employee shall have no rights as a stockholder with respect to Shares subject to this Agreement until registration of the Shares in the Company's share register in the name of the Employee. Except as is expressly provided in the Plan with respect to certain changes in the capitalization of the Company, no adjustment shall be made for dividends or similar rights for which the record date is prior to the date of such registration.

9. ADJUSTMENTS.

The Plan contains provisions covering the treatment of Options in a number of contingencies such as stock splits and mergers. Provisions in the Plan for adjustment with respect to stock subject to Options and the related provisions with respect to successors to the business of the Company are hereby made applicable hereunder and are incorporated herein by reference.

10. TAXES.

The Employee acknowledges that any income or other taxes due from him or her with respect to this Option or the Shares issuable pursuant to this Option shall be the Employee's responsibility.

In the event of a Disqualifying Disposition (as defined in Section 15 below) or if the Option is converted into a Non-Qualified Option and such Non-Qualified Option is exercised, the Company may withhold from the Employee's remuneration, if any, the minimum statutory

amount of federal, state and local withholding taxes attributable to such amount that is considered compensation includable in such person's gross income. At the Company's discretion, the amount required to be withheld may be withheld in cash from such remuneration, or in kind from the Shares otherwise deliverable to the Employee on exercise of the Option. The Employee further agrees that, if the Company does not withhold an amount from the Employee's remuneration sufficient to satisfy the Company's income tax withholding obligation, the Employee will reimburse the Company on demand, in cash, for the amount under-withheld.

11. PURCHASE FOR INVESTMENT.

Unless the offering and sale of the Shares to be issued upon the particular exercise of the Option shall have been effectively registered under the Securities Act of 1933, as now in force or hereafter amended (the "1933 Act"), the Company shall be under no obligation to issue the Shares covered by such exercise unless and until the following conditions have been fulfilled:

(a) The person(s) who exercise the Option shall warrant to the Company, at the time of such exercise, that such person(s) are acquiring such Shares for their own respective accounts, for investment, and not with a view to, or for sale in connection with, the distribution of any such Shares, in which event the person(s) acquiring such Shares shall be bound by the provisions of the following legend which shall be endorsed upon the certificate(s) evidencing the Shares issued pursuant to such exercise:

> "The shares represented by this certificate have been taken for investment and they may not be sold or otherwise transferred by any person, including a pledgee, unless (1) either (a) a Registration Statement with respect to such shares shall be effective under the Securities Act of 1933, as amended, or (b) the Company shall have received an opinion of counsel satisfactory to it that an exemption from registration under such Act is then available, and (2) there shall have been compliance with all applicable state securities laws;" and

(b) If the Company so requires, the Company shall have received an opinion of its counsel that the Shares may be issued upon such particular exercise in compliance with the 1933 Act without registration thereunder. Without limiting the generality of the foregoing, the Company may delay issuance of the Shares until completion of any action or obtaining of any consent, which the Company deems necessary under any applicable law (including without limitation state securities or "blue sky" laws).

12. RESTRICTIONS ON TRANSFER OF SHARES.

12.1 The Shares acquired by the Employee pursuant to the exercise of the Option granted hereby shall not be transferred by the Employee except as permitted herein.

12.2 In the event of the Employee's termination of employment for any reason, the Company shall have the option, but not the obligation, to repurchase all or any part of the Shares issued pursuant to this Agreement (including, without limitation, Shares purchased after termination of employment, Disability or death in accordance with Section 4 hereof). In the event the Company does not, upon the termination of employment of the Employee (as described above), exercise its option pursuant to this Section 12.2, the restrictions set forth in the balance of this Agreement shall not thereby lapse, and the Employee for himself or herself, his or her heirs, legatees, executors, administrators and other successors in interest, agrees that the Shares shall remain subject to such restrictions. The following provisions shall apply to a repurchase under this Section 12.2:

(i) The per share repurchase price of the Shares to be sold to the Company upon exercise of its option under this Section 12.2 shall be equal to the Fair Market Value of each such Share determined in accordance with the Plan as of the date of termination of employment provided, however, in the event of a termination by the Company for "cause" (as defined in the Plan), the per share repurchase price of the Shares to be sold to the Company upon exercise of its option under this Section 12.2 shall be equal to the Purchase Price.

(ii) The Company's option to repurchase the Employee's Shares in the event of termination of employment shall be valid for a period of 18 months commencing with the date of such termination of employment.

(iii) In the event the Company shall be entitled to and shall elect to exercise its option to repurchase the Employee's Shares under this Section 12.2, the Company shall notify the Employee, or in case of death, his or her Survivor, in writing of its intent to repurchase the Shares. Such written notice may be mailed by the Company up to and including the last day of the time period provided for in Section 12.2(ii) for exercise of the Company's option to repurchase.

(iv) The written notice to the Employee shall specify the address at, and the time and date on, which payment of the repurchase price is to be made (the "Closing"). The date specified shall not be less than ten days nor more than 60 days from the date of the mailing of the notice, and the Employee or his or her successor in interest with respect to the Shares shall have no further rights as the owner thereof from and after the date specified in the notice. At the Closing, the repurchase price shall be delivered to the Employee or his or her successor in interest and the Shares being purchased, duly endorsed for transfer, shall, to the extent that they are not then in the possession of the Company, be delivered to the Company by the Employee or his or her successor in interest.

12.3 It shall be a condition precedent to the validity of any sale or other transfer of any Shares by the Employee that the following restrictions be complied with (except as hereinafter otherwise provided):

(i) No Shares owned by the Employee may be sold, pledged or otherwise transferred (including by gift or devise) to any person or entity, voluntarily, or by operation of law, except in accordance with the terms and conditions hereinafter set forth.

(ii) Before selling or otherwise transferring all or part of the Shares, the Employee shall give written notice of such intention to the Company, which notice shall include the name of the proposed transferee, the proposed purchase price per share, the terms of

payment of such purchase price and all other matters relating to such sale or transfer and shall be accompanied by a copy of the binding written agreement of the proposed transferee to purchase the Shares of the Employee. Such notice shall constitute a binding offer by the Employee to sell to the Company such number of the Shares then held by the Employee as are proposed to be sold in the notice at the monetary price per share designated in such notice, payable on the terms offered to the Employee by the proposed transferee (provided, however, that the Company shall not be required to meet any non-monetary terms of the proposed transfer, including, without limitation, delivery of other securities in exchange for the Shares proposed to be sold). The Company shall give written notice to the Employee as to whether such offer has been accepted in whole by the Company within 60 days after its receipt of written notice from the Employee. The Company may only accept such offer in whole and may not accept such offer in part. Such acceptance notice shall fix a time, location and date for the closing on such purchase ("Closing Date") which shall not be less than ten nor more than sixty days after the giving of the acceptance notice, provided, however, if any of the Shares to be sold pursuant to this Section 12.3 have been held by the Employee for less than six months, then the Closing Date may be extended by the Company until no more than ten days after such Shares have been held by the Employee for six months. The place for such closing shall be at the Company's principal office. At such closing, the Employee shall accept payment as set forth herein and shall deliver to the Company in exchange therefor certificates for the number of Shares stated in the notice accompanied by duly executed instruments of transfer.

(iii) If the Company shall fail to accept any such offer, the Employee shall be free to sell all, but not less than all, of the Shares set forth in his or her notice to the designated transferee at the price and terms designated in the Employee's notice, provided that (i) such sale is consummated within six months after the giving of notice by the Employee to the Company as aforesaid, and (ii) the transferee first agrees in writing to be bound by the provisions of this Section 12 so that such transferee (and all subsequent transferees) shall thereafter only be permitted to sell or transfer the Shares in accordance with the terms hereof. After the expiration of such six months, the provisions of this Section 12.3 shall again apply with respect to any proposed voluntary transfer of the Employee's Shares.

(iv) The restrictions on transfer contained in this Section 12.3 shall not apply to (a) transfers by the Employee to his or her spouse or children or to a trust for the benefit of his or her spouse or children, (b) transfers by the Employee to his or her

guardian or conservator, and (c) transfers by the Employee, in the event of his or her death, to his or her executor(s) or administrator(s) or to trustee(s) under his or her will (collectively, "Permitted Transferees"); provided however, that in any such event the Shares so transferred in the hands of each such Permitted Transferee shall remain subject to this Agreement, and each such Permitted Transferee shall so acknowledge in writing as a condition precedent to the effectiveness of such transfer.

(v) The provisions of this Section 12.3 may be waived by the Company. Any such waiver may be unconditional or based upon such conditions as the Company may impose.

12.4 In the event that the Employee or his or her successor in interest fails to deliver the Shares to be repurchased by the Company under this Agreement, the Company may elect (a) to establish a segregated account in the amount of the repurchase price, such account to be turned over to the Employee or his or her successor in interest upon delivery of such Shares, and (b) immediately to take such action as is appropriate to transfer record title of such Shares from the Employee to the Company and to treat the Employee and such Shares in all respects as if delivery of such Shares had been made as required by this Agreement. The Employee hereby irrevocably grants the Company a power of attorney which shall be coupled with an interest for the purpose of effectuating the preceding sentence.

12.5 If the Company shall pay a stock dividend or declare a stock split on or with respect to any of its Common Stock, or otherwise distribute securities of the Company to the holders of its Common Stock, the number of shares of stock or other securities of Company issued with respect to the shares then subject to the restrictions contained in this Agreement shall be added to

the Shares subject to the Company's rights to repurchase pursuant to this Agreement. If the Company shall distribute to its stockholders shares of stock of another corporation, the shares of stock of such other corporation, distributed with respect to the Shares then subject to the restrictions contained in this Agreement, shall be added to the Shares subject to the Company's rights to repurchase pursuant to this Agreement.

12.6 If the outstanding shares of Common Stock of the Company shall be subdivided into a greater number of shares or combined into a smaller number of shares, or in the event of a reclassification of the outstanding shares of Common Stock of the Company, or if the Company shall be a party to a merger, consolidation or capital reorganization, there shall be substituted for the Shares then subject to the restrictions contained in this Agreement such amount and kind of securities as are issued in such subdivision, combination, reclassification, merger, consolidation or capital reorganization in respect of the Shares subject immediately prior thereto to the Company's rights to repurchase pursuant to this Agreement.

12.7 The Company shall not be required to transfer any Shares on its books which shall have been sold, assigned or otherwise transferred in violation of this Agreement, or to treat as owner of such Shares, or to accord the right to vote as such owner or to pay dividends to, any person or organization to which any such Shares shall have been so sold, assigned or otherwise transferred, in violation of this Agreement.

12.8 The provisions of Sections 12.1, 12.2 and 12.3 shall terminate upon the effective date of the registration of the Shares pursuant to the Securities Exchange Act of 1934.

12.9 If, in connection with a registration statement filed by the Company pursuant to the 1933 Act, the Company or its underwriter so requests, the Employee will agree not to sell any Shares for a period not to exceed 180 days following the effectiveness of such registration.

12.10 The Employee acknowledges and agrees that neither the Company, its shareholders nor its directors and officers, has any duty or obligation to disclose to the Employee any material information regarding the business of the Company or affecting the value of the Shares before, at the time of, or following a termination of the employment of the Employee by the Company, including, without limitation, any information concerning plans for the Company to make a public offering of its securities or to be acquired by or merged with or into another firm or entity.

12.11 All certificates representing the Shares to be issued to the Employee pursuant to this Agreement shall have endorsed thereon a legend substantially as follows: "The shares represented by this certificate are subject to restrictions set forth in an Incentive Stock Option Agreement dated _____, 200__ with this Company, a copy of which Agreement is available for inspection at the offices of the Company or will be made available upon request."

13. NO OBLIGATION TO EMPLOY.

The Company is not by the Plan or this Option obligated to continue the Employee as an employee of the Company or an Affiliate. The Employee acknowledges: (i) that the Plan is discretionary in nature and may be suspended or terminated by the Company at any time; (ii) that the grant of the Option is a one-time benefit which does not create any contractual or other right to receive future grants of options, or benefits in lieu of options; (iii) that all determinations with respect to any such future grants, including, but not limited to, the times when options shall be granted, the number of shares subject to each option, the option price, and the time or times when each option shall be exercisable, will be at the sole discretion of the Company; (iv) that the Employee's participation in the Plan is voluntary; (v) that the value of the Option is an extraordinary item of compensation which is outside the scope of the Employee's employment contract, if any; and (vi) that the Option is not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments.

14. OPTION IS INTENDED TO BE AN ISO.

The parties each intend that the Option be an ISO so that the Employee (or the Employee's Survivors) may qualify for the favorable tax treatment provided to holders of Options that meet the standards of Section 422 of the Code. Any provision of this Agreement or the Plan which conflicts with the Code so that this Option would not be deemed an ISO is null and void and any ambiguities shall be resolved so that the Option qualifies as an ISO. Nonetheless, if the

Option is determined not to be an ISO, the Employee understands that neither

the Company nor any Affiliate is responsible to compensate him or her or otherwise make up for the treatment of the Option as a Non-qualified Option and not as an ISO. The Employee should consult with the Employee's own tax advisors regarding the tax effects of the Option and the requirements necessary to obtain favorable tax treatment under Section 422 of the Code, including, but not limited to, holding period requirements.

15. NOTICE TO COMPANY OF DISQUALIFYING DISPOSITION.

The Employee agrees to notify the Company in writing immediately after the Employee makes a Disqualifying Disposition of any of the Shares acquired pursuant to the exercise of the Option. A Disqualifying Disposition is defined in Section 424(c) of the Code and includes any disposition (including any sale) of such Shares before the later of (a) two years after the date the Employee was granted the Option or (b) one year after the date the Employee acquired Shares by exercising the Option, except as otherwise provided in Section 424(c) of the Code. If the Employee has died before the Shares are sold, these holding period requirements do not apply and no Disqualifying Disposition can occur thereafter.

16. NOTICES.

Any notices required or permitted by the terms of this Agreement or the Plan shall be given by recognized courier service, facsimile, registered or certified mail, return receipt requested, addressed as follows:

If to the Company:

Metabolix, Inc.
21 Erie Street
Cambridge, MA 02139-4260
Attention: Controller

If to the Employee, at the address set forth below his or her signature below,

or to such other address or addresses of which notice in the same manner has previously been given. Any such notice shall be deemed to have been given upon the earlier of receipt, one business day following delivery to a recognized courier service or three business days following mailing by registered or certified mail.

17. GOVERNING LAW.

This Agreement shall be construed and enforced in accordance with the law of the State of Delaware, without giving effect to the conflict of law principles thereof. For the purpose of litigating any dispute that arises under this Agreement, the parties hereby consent to exclusive jurisdiction in the Commonwealth of Massachusetts and agree that such litigation shall be conducted in the courts of Middlesex County, Massachusetts or the federal courts of the United States for the District of Massachusetts.

18. BENEFIT OF AGREEMENT.

Subject to the provisions of the Plan and the other provisions hereof, this Agreement shall be for the benefit of and shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

19. ENTIRE AGREEMENT.

This Agreement, together with the Plan, embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement not expressly set forth in this Agreement shall affect or be used to interpret, change or restrict, the express terms and provisions of this Agreement, provided, however, in any event, this Agreement shall be subject to and governed by the Plan.

20. MODIFICATIONS AND AMENDMENTS.

The terms and provisions of this Agreement may be modified or amended as provided in the Plan.

21. WAIVERS AND CONSENTS.

Except as provided in the Plan, the terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

22. DATA PRIVACY.

By entering into this Agreement, the Employee: (i) authorizes the Company and each Affiliate, and any agent of the Company or any Affiliate administering the Plan or providing Plan recordkeeping services, to disclose to the Company or any of its Affiliates such information and data as the Company or any such Affiliate shall request in order to facilitate the grant of options and the administration of the Plan; (ii) waives any data privacy rights he or she may have with respect to such information; and (iii) authorizes the Company and each Affiliate to store and transmit such information in electronic form.

23. CONSENT OF SPOUSE.

If the Employee is married as of the date of this Agreement, the Employee's spouse shall execute a Consent of Spouse in the form of EXHIBIT B hereto, effective as of the date hereof. Such consent shall not be deemed to confer or convey to the spouse any rights in the Shares that do not otherwise exist by operation of law or the agreement of the parties. If the Employee marries or remarries subsequent to the date hereof, the Employee shall, not later than 60 days thereafter, obtain his or her new spouse's acknowledgement of and consent to the existence and binding effect of Section 12.2 of this Agreement by such spouse's executing and delivering a Consent of Spouse in the form of Exhibit B.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized officer, and the Employee has hereunto set his or her hand, all as of the day and year first above written.

METABOLIX, INC.

By:

Name: James J. Barber
Title: President and CEO

Employee:

Address:

EXHIBIT A

[FORM FOR UNREGISTERED SHARES]

NOTICE OF EXERCISE OF INCENTIVE STOCK OPTION

To: Metabolix, Inc.

Ladies and Gentlemen:

I hereby exercise my Incentive Stock Option to purchase _____ shares (the "Shares") of the common stock, $.01 par value, of Metabolix, Inc. (the "Company"), at the exercise price of $____ per share, pursuant to and subject to the terms of that certain Incentive Stock Option Agreement between the undersigned and the Company dated _____, 200_.

I am aware that the Shares have not been registered under the Securities Act of 1933, as amended (the "1933 Act"), or any state securities laws. I understand that the reliance by the Company on exemptions under the 1933 Act is predicated in part upon the truth and accuracy of the statements by me in this Notice of Exercise.

I hereby represent and warrant that (1) I have been furnished with all information which I deem necessary to evaluate the merits and risks of the purchase of the Shares; (2) I have had the opportunity to ask questions concerning the Shares and the Company and all questions posed have been answered to my satisfaction; (3) I have been given the opportunity to obtain any additional information I deem necessary to verify the accuracy of any information obtained concerning the Shares and the Company; and (4) I have such knowledge and experience in financial and business matters that I am able to evaluate the merits and risks of purchasing the Shares and to make an informed investment decision relating thereto.

I hereby represent and warrant that I am purchasing the Shares for my own personal account for investment and not with a view to the sale or distribution of all or any part of the Shares.

I understand that because the Shares have not been registered under the 1933 Act, I must continue to bear the economic risk of the investment for an indefinite time and the Shares cannot be sold unless the Shares are subsequently registered under applicable federal and state securities laws or an exemption from such registration requirements is available.

I agree that I will in no event sell or distribute or otherwise dispose of all or any part of the Shares unless (1) there is an effective registration statement under the 1933 Act and applicable state securities laws covering any such transaction involving the Shares or (2) the Company receives an opinion of my legal counsel (concurred in by legal counsel for the

Company) stating that such transaction is exempt from registration or the Company otherwise satisfies itself that such transaction is exempt from registration.

I consent to the placing of a legend on my certificate for the Shares stating that the Shares have not been registered and setting forth the restriction on transfer contemplated hereby and to the placing of a stop transfer order on the books of the Company and with any transfer agents against the Shares until the Shares may be legally resold or distributed without restriction.

I understand that at the present time Rule 144 of the Securities and Exchange Commission (the "SEC") may not be relied on for the resale or distribution of the Shares by me. I understand that the Company has no obligation to me to register the sale of the Shares with the SEC and has not represented to me that it will register the sale of the Shares.

I understand the terms and restrictions on the right to dispose of the Shares set forth in the 2004 Employee, Director and Consultant Stock Plan and the Incentive Stock Option Agreement, both of which I have carefully reviewed. I consent to the placing of a legend on my certificate for the Shares referring to such restriction and the placing of stop transfer orders until the Shares may be transferred in accordance with the terms of such restrictions.

I have considered the Federal, state and local income tax implications of the exercise of my Option and the purchase and subsequent sale of the Shares.

I am paying the option exercise price for the Shares as follows:

Please issue the stock certificate for the Shares (check one):

/ / to me; or

/ / to me and _____, as joint tenants with right of survivorship

and mail the certificate to me at the following address:

- ----------

- ----------

- ----------

My mailing address for shareholder communications, if different from the address listed above is:

- ----------

- ----------

- ----------

Very truly yours,

Employee (signature)

Print Name

Date

Social Security Number

EXHIBIT A

[FORM FOR REGISTERED SHARES]

NOTICE OF EXERCISE OF INCENTIVE STOCK OPTION

IMPORTANT NOTICE: This form of Notice of Exercise may only be used at such time as the Company has filed a Registration Statement with the Securities and Exchange Commission under which the issuance of the Shares for which this exercise is being made is registered and such Registration Statement remains effective.

TO: Metabolix, Inc.

Ladies and Gentlemen:

I hereby exercise my Incentive Stock Option to purchase _____ shares (the "Shares") of the common stock, $.01 par value, of Metabolix, Inc. (the "Company"), at the exercise price of $_____ per share, pursuant to and subject to the terms of that certain Incentive Stock Option Agreement between the undersigned and the Company dated _____, 200_.

I understand the nature of the investment I am making and the financial risks thereof. I am aware that it is my responsibility to have consulted with competent tax and legal advisors about the relevant national, state and local income tax and securities laws affecting the exercise of the Option and the purchase and subsequent sale of the Shares.

I am paying the option exercise price for the Shares as follows:

Please issue the Shares (check one):

/ / to me; or

/ / to me and _____, as joint tenants with right of survivorship,

at the following address:

My mailing address for shareholder communications, if different from the address listed above, is:

Very truly yours,

Employee (signature)

Print Name

Date

Social Security Number

EXHIBIT B

CONSENT OF SPOUSE

I, _____, spouse of _____, acknowledge that I have read the Incentive Stock Option Agreement dated as of _____, 200__ (the "Agreement") to which this Consent is attached as Exhibit B and that I know its contents. Capitalized terms used and not defined herein shall have the meanings assigned to such terms in the Agreement. I am aware that by its provisions the Shares granted to my spouse pursuant to the Agreement are subject to a right of repurchase in favor of Metabolix, Inc. (the "Company") and that, accordingly, the Company has the right to repurchase up to all of the Shares of which I may become possessed as a result of a gift from my spouse or a court decree and/or any property settlement in any domestic litigation.

I hereby agree that my interest, if any, in the Shares subject to the Agreement shall be irrevocably bound by the Agreement and further understand and agree that any community property interest I may have in the Shares shall be similarly bound by the Agreement.

I agree to the repurchase right described in Section 12.2 of the Agreement and I hereby consent to the repurchase of the Shares by the Company and the sale of the Shares by my spouse or my spouse's legal representative in accordance with the provisions of the Agreement. Further, as part of the consideration for the Agreement, I agree that at my death, if I have not disposed of any interest of mine in the Shares by an outright bequest of the Shares to my spouse, then the Company shall have the same rights against my legal representative to exercise its rights of repurchase with respect to any interest of mine in the Shares as it would have had pursuant to the Agreement if I had acquired the Shares pursuant to a court decree in domestic litigation.

I AM AWARE THAT THE LEGAL, FINANCIAL AND RELATED MATTERS CONTAINED IN THE AGREEMENT ARE COMPLEX AND THAT I AM FREE TO SEEK INDEPENDENT PROFESSIONAL GUIDANCE OR COUNSEL WITH RESPECT TO THIS CONSENT. I HAVE EITHER SOUGHT SUCH GUIDANCE OR COUNSEL OR DETERMINED AFTER REVIEWING THE AGREEMENT CAREFULLY THAT I WILL WAIVE SUCH RIGHT.

Dated as of the _____ day of _____, 200__.

Print name:

Exhibit 10.2.2

NON-QUALIFIED STOCK OPTION AGREEMENT

METABOLIX, INC.

AGREEMENT made as of the __ day of _____ 200_, between Metabolix, Inc. (the "Company"), a Delaware corporation, and _____ (the "Participant").

WHEREAS, the Company desires to grant to the Participant an Option to purchase shares of its common stock, $.01 par value per share (the "Shares"), under and for the purposes set forth in the Company's 2005 Stock Plan (the "Plan");

WHEREAS, the Company and the Participant understand and agree that any terms used and not defined herein have the same meanings as in the Plan; and

WHEREAS, the Company and the Participant each intend that the Option granted herein shall be a Non-Qualified Option.

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth and for other good and valuable consideration, the parties hereto agree as follows:

1. GRANT OF OPTION.

The Company hereby grants to the Participant the right and option to purchase all or any part of an aggregate of _____ Shares, on the terms and conditions and subject to all the limitations set forth herein, under United States securities and tax laws, and in the Plan, which is incorporated herein by reference. The Participant acknowledges receipt of a copy of the Plan.

2. PURCHASE PRICE.

The purchase price of the Shares covered by the Option shall be $_____ per Share, subject to adjustment, as provided in the Plan, in the event of a stock split, reverse stock split or other events affecting the holders of Shares (the "Purchase Price"). Payment shall be made in accordance with Paragraph 9 of the Plan.

3. EXERCISABILITY OF OPTION.

Subject to the terms and conditions set forth in this Agreement and the Plan, the Option granted hereby shall become exercisable as follows:

[TO BE COMPLETED BY COMPANY FOR EACH PARTICIPANT]

The foregoing rights are cumulative and are subject to the other terms and conditions of this Agreement and the Plan.

4. TERM OF OPTION.

The Option shall terminate ten years from the date of this Agreement, but shall be subject to earlier termination as provided herein or in the Plan.

If the Participant ceases to be an employee, director or consultant of the Company or of an Affiliate (for any reason other than the death or Disability of the Participant or termination of the Participant for "cause" (as defined in the Plan)), the Option may be exercised, if it has not previously terminated, within three months after the date the Participant ceases to be an employee, director or consultant of the Company or an Affiliate, or within the originally prescribed term of the Option, whichever is earlier, but may not be exercised thereafter. In such event, the Option shall be exercisable only to the extent that the Option has become exercisable and is in effect at the date of such cessation of employment, directorship or consultancy.

Notwithstanding the foregoing, in the event of the Participant's Disability or death within three months after the termination of employment, directorship or consultancy, the Participant or the Participant's Survivors may exercise the Option within one year after the date of the Participant's termination of employment, directorship or consultancy, but in no event after the date of expiration of the term of the Option.

In the event the Participant's employment, directorship or consultancy is terminated by the Company or an Affiliate for "cause" (as defined in the Plan),

the Participant's right to exercise any unexercised portion of this Option shall cease immediately as of the time the Participant is notified his or her employment, directorship or consultancy is terminated for "cause," and this Option shall thereupon terminate. Notwithstanding anything herein to the contrary, if subsequent to the Participant's termination, but prior to the exercise of the Option, the Board of Directors of the Company determines that, either prior or subsequent to the Participant's termination, the Participant engaged in conduct which would constitute "cause," then the Participant shall immediately cease to have any right to exercise the Option and this Option shall thereupon terminate.

In the event of the Disability of the Participant, as determined in accordance with the Plan, the Option shall be exercisable within one year after the Participant's termination of service or, if earlier, within the term originally prescribed by the Option. In such event, the Option shall be exercisable:

(a) to the extent that the Option has become exercisable but has not been exercised as of the date of Disability; and

(b) in the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of Disability of any additional vesting rights that would have accrued on the next vesting date had the Participant not become Disabled. The proration shall be based upon the number of days accrued in the current vesting period prior to the date of Disability.

In the event of the death of the Participant while an employee, director or consultant of the Company or of an Affiliate, the Option shall be exercisable by the Participant's Survivors within one year after the date of death of the Participant or, if earlier, within the originally prescribed term of the Option. In such event, the Option shall be exercisable:

(x) to the extent that the Option has become exercisable but has not been exercised as of the date of death; and

(y) in the event rights to exercise the Option accrue periodically, to the extent of a pro rata portion through the date of death of any additional vesting rights that would have accrued on the next vesting date had the Participant not died. The proration shall be based upon the number of days accrued in the current vesting period prior to the Participant's date of death.

5. METHOD OF EXERCISING OPTION.

Subject to the terms and conditions of this Agreement, the Option may be exercised by written notice to the Company or its designee, in substantially the form of EXHIBIT A attached hereto. Such notice shall state the number of Shares with respect to which the Option is being exercised and shall be signed by the person exercising the Option. Payment of the purchase price for such Shares shall be made in accordance with Paragraph 9 of the Plan. The Company shall deliver such Shares as soon as practicable after the notice shall be received, provided, however, that the Company may delay issuance of such Shares until completion of any action or obtaining of any consent, which the Company deems necessary under any applicable law (including, without limitation, state securities or "blue sky" laws). The Shares as to which the Option shall have been so exercised shall be registered in the Company's share register in the name of the person so exercising the Option (or, if the Option shall be exercised by the Participant and if the Participant shall so request in the notice exercising the Option, shall be registered in the Company's share register in the name of the Participant and another person jointly, with right of survivorship) and shall be delivered as provided above to or upon the written order of the person exercising the Option. In the event the Option shall be exercised, pursuant to Section 4 hereof, by any person other than the Participant, such notice shall be accompanied by appropriate proof of the right of such person to exercise the Option. All Shares that shall be purchased upon the exercise of the Option as provided herein shall be fully paid and nonassessable.

6. PARTIAL EXERCISE.

Exercise of this Option to the extent above stated may be made in part at any time and from time to time within the above limits, except that no fractional share shall be issued pursuant to this Option.

7. NON-ASSIGNABILITY.

The Option shall not be transferable by the Participant otherwise than by will or by the laws of descent and distribution or pursuant to a qualified domestic relations order as defined by the Code or Title I of the Employee Retirement Income Security Act or the rules thereunder. Except as provided in the previous sentence, the Option shall be exercisable, during the Participant's lifetime, only by the Participant (or, in the event of legal incapacity or incompetency, by the Participant's guardian or representative) and shall not be assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to execution, attachment or similar process. Any attempted transfer, assignment, pledge, hypothecation or other disposition of the Option or of any rights granted hereunder contrary to the provisions of this Section 7, or the levy of any attachment or similar process upon the Option shall be null and void.

8. NO RIGHTS AS STOCKHOLDER UNTIL EXERCISE.

The Participant shall have no rights as a stockholder with respect to Shares subject to this Agreement until registration of the Shares in the Company's share register in the name of the Participant. Except as is expressly provided in the Plan with respect to certain changes in the capitalization of the Company, no adjustment shall be made for dividends or similar rights for which the record date is prior to the date of such registration.

9. ADJUSTMENTS.

The Plan contains provisions covering the treatment of Options in a number of contingencies such as stock splits and mergers. Provisions in the Plan for adjustment with respect to stock subject to Options and the related provisions with respect to successors to the business of the Company are hereby made applicable hereunder and are incorporated herein by reference.

10. TAXES.

The Participant acknowledges that upon exercise of the Option the Participant will be deemed to have taxable income measured by the difference between the then fair market value of the Shares received upon exercise and the price paid for such Shares pursuant to this Agreement. The Participant acknowledges that any income or other taxes due from him or her with respect to this Option or the Shares issuable pursuant to this Option shall be the Participant's responsibility.

The Participant agrees that the Company may withhold from the Participant's remuneration, if any, the minimum statutory amount of federal, state and local withholding taxes attributable to such amount that is considered compensation includable in such person's gross income. At the Company's discretion, the amount required to be withheld may be withheld in

cash from such remuneration, or in kind from the Shares otherwise deliverable to the Participant on exercise of the Option. The Participant further agrees that, if the Company does not withhold an amount from the Participant's remuneration sufficient to satisfy the Company's income tax withholding obligation, the Participant will reimburse the Company on demand, in cash, for the amount under-withheld.

11. PURCHASE FOR INVESTMENT.

Unless the offering and sale of the Shares to be issued upon the particular exercise of the Option shall have been effectively registered under the Securities Act of 1933, as now in force or hereafter amended (the "1933 Act"), the Company shall be under no obligation to issue the Shares covered by such exercise unless and until the following conditions have been fulfilled:

(a) The person(s) who exercise the Option shall warrant to the Company, at the time of such exercise, that such person(s) are acquiring such Shares for their own respective accounts, for investment, and not with a view to, or for sale in connection with, the distribution of any such Shares, in which event the person(s) acquiring such Shares shall be bound by the provisions of the following legend which shall be endorsed upon the certificate(s) evidencing the Shares issued pursuant to such exercise:

> "The shares represented by this certificate have been taken for investment and they may not be sold or otherwise transferred by any person, including a pledgee, unless (1) either (a) a Registration Statement with respect to such shares shall be effective under the

Securities Act of 1933, as amended, or (b) the Company shall have received an opinion of counsel satisfactory to it that an exemption from registration under such Act is then available, and (2) there shall have been compliance with all applicable state securities laws;" and

(b) If the Company so requires, the Company shall have received an opinion of its counsel that the Shares may be issued upon such particular exercise in compliance with the 1933 Act without registration thereunder. Without limiting the generality of the foregoing, the Company may delay issuance of the Shares until completion of any action or obtaining of any consent, which the Company deems necessary under any applicable law (including without limitation state securities or "blue sky" laws).

12. RESTRICTIONS ON TRANSFER OF SHARES.

12.1 The Shares acquired by the Participant pursuant to the exercise of the Option granted hereby shall not be transferred by the Participant except as permitted herein.

12.2 In the event of the Participant's termination of service for any reason, the Company shall have the option, but not the obligation, to repurchase all or any part of the Shares issued pursuant to this Agreement (including, without limitation, Shares purchased after termination of employment, Disability or death in accordance with Section 4 hereof). In the event the Company does not, upon the termination of service of the Participant (as described

above), exercise its option pursuant to this Section 12.2, the restrictions set forth in the balance of this Agreement shall not thereby lapse, and the Participant for himself or herself, his or her heirs, legatees, executors, administrators and other successors in interest, agrees that the Shares shall remain subject to such restrictions. The following provisions shall apply to a repurchase under this Section 12.2:

(i) The per share repurchase price of the Shares to be sold to the Company upon exercise of its option under this Section 12.2 shall be equal to the Fair Market Value of each such Share determined in accordance with the Plan as of the date of termination of service, provided, however, in the event of a termination by the Company for "cause" (as defined in the Plan), the per share repurchase price of the Shares to be sold to the Company upon exercise of its option under this Section 12.2 shall be equal to the Purchase Price.

(ii) The Company's option to repurchase the Participant's Shares in the event of termination of service shall be valid for a period of 18 months commencing with the date of such termination of service.

(iii) In the event the Company shall be entitled to and shall elect to exercise its option to repurchase the Participant's Shares under this Section 12.2, the Company shall notify the Participant, or in case of death, his or her Survivor, in writing of its intent to repurchase the Shares. Such written notice may be mailed by the Company up to and including the last day of the time period provided for in Section 12.2(ii) for exercise of the Company's option to repurchase.

(iv) The written notice to the Participant shall specify the address at, and the time and date on, which payment of the repurchase price is to be made (the "Closing"). The date specified shall not be less than ten days nor more than 60 days from the date of the mailing of the notice, and the Participant or his or her successor in interest with respect to the Shares shall have no further rights as the owner thereof from and after the date specified in the notice. At the Closing, the repurchase price shall be delivered to the Participant or his or her successor in interest and the Shares being purchased, duly endorsed for transfer, shall, to the extent that they are not then in the possession of the Company, be delivered to the Company by the Participant or his or her successor in interest.

12.3 It shall be a condition precedent to the validity of any sale or other transfer of any Shares by the Participant that the following restrictions be complied with (except as hereinafter otherwise provided):

(i) No Shares owned by the Participant may be sold, pledged or otherwise transferred (including by gift or devise) to any person or entity, voluntarily, or by operation of law, except in

accordance with the terms and conditions hereinafter set forth.

(ii) Before selling or otherwise transferring all or part of the Shares, the Participant shall give written notice of such intention to the Company, which notice shall include the name of the proposed transferee, the proposed purchase price per share, the terms of payment of such purchase

price and all other matters relating to such sale or transfer and shall be accompanied by a copy of the binding written agreement of the proposed transferee to purchase the Shares of the Participant. Such notice shall constitute a binding offer by the Participant to sell to the Company such number of the Shares then held by the Participant as are proposed to be sold in the notice at the monetary price per share designated in such notice, payable on the terms offered to the Participant by the proposed transferee (provided, however, that the Company shall not be required to meet any non-monetary terms of the proposed transfer, including, without limitation, delivery of other securities in exchange for the Shares proposed to be sold). The Company shall give written notice to the Participant as to whether such offer has been accepted in whole by the Company within sixty days after its receipt of written notice from the Participant. The Company may only accept such offer in whole and may not accept such offer in part. Such acceptance notice shall fix a time, location and date for the closing on such purchase ("Closing Date") which shall not be less than ten nor more than sixty days after the giving of the acceptance notice, provided, however, if any of the Shares to be sold pursuant to this Section 12.3 have been held by the Participant for less than six months, then the Closing Date may be extended by the Company until no more than ten days after such Shares have been held by the Participant for six months. The place for such closing shall be at the Company's principal office. At such closing, the Participant shall accept payment as set forth herein and shall deliver to the Company in exchange therefor certificates for the number of Shares stated in the notice accompanied by duly executed instruments of transfer.

(iii) If the Company shall fail to accept any such offer, the Participant shall be free to sell all, but not less than all, of the Shares set forth in his or her notice to the designated transferee at the price and terms designated in the Participant's notice, provided that (i) such sale is consummated within six months after the giving of notice by the Participant to the Company as aforesaid, and (ii) the transferee first agrees in writing to be bound by the provisions of this Section 12 so that such transferee (and all subsequent transferees) shall thereafter only be permitted to sell or transfer the Shares in accordance with the terms hereof. After the expiration of such six months, the provisions of this Section 12.3 shall again apply with respect to any proposed voluntary transfer of the Participant's Shares.

(iv) The restrictions on transfer contained in this Section 12.3 shall not apply to (a) transfers by the Participant to his or her spouse or children or to a trust for the benefit of his or her spouse or children, (b) transfers by the Participant to his or her guardian or conservator, and (c) transfers by the Participant, in the event of his or her death, to his or her executor(s) or administrator(s) or to trustee(s) under his or her will (collectively, "Permitted Transferees"); provided however, that in any such event the Shares so transferred in the hands of each such Permitted Transferee shall remain subject to this Agreement, and each such Permitted Transferee shall so acknowledge in writing as a condition precedent to the effectiveness of such transfer.

(v) The provisions of this Section 12.3 may be waived by the Company. Any such waiver may be unconditional or based upon such conditions as the Company may impose.

12.4 In the event that the Participant or his or her successor in interest fails to deliver the Shares to be repurchased by the Company under this Agreement, the Company may elect (a) to establish a segregated account in the

amount of the repurchase price, such account to be turned over to the Participant or his or her successor in interest upon delivery of such Shares, and (b) immediately to take such action as is appropriate to transfer record title of such Shares from the Participant to the Company and to treat the Participant and such Shares in all respects as if delivery of such Shares had been made as required by this Agreement. The Participant hereby irrevocably grants the Company a power of attorney which shall be coupled with an interest for the purpose of effectuating the preceding sentence.

12.5 If the Company shall pay a stock dividend or declare a stock split on or with respect to any of its Common Stock, or otherwise distribute securities of the Company to the holders of its Common Stock, the number of shares of stock or other securities of Company issued with respect to the shares then subject to the restrictions contained in this Agreement shall be added to the Shares subject to the Company's rights to repurchase pursuant to this Agreement. If the Company shall distribute to its stockholders shares of stock of another corporation, the shares of stock of such other corporation, distributed with respect to the Shares then subject to the restrictions contained in this Agreement, shall be added to the Shares subject to the Company's rights to repurchase pursuant to this Agreement.

12.6 If the outstanding shares of Common Stock of the Company shall be subdivided into a greater number of shares or combined into a smaller number of shares, or in the event of a reclassification of the outstanding shares of Common Stock of the Company, or if the Company shall be a party to a merger, consolidation or capital reorganization, there shall be substituted for the Shares then subject to the restrictions contained in this Agreement such amount and kind of securities as are issued in such subdivision, combination, reclassification, merger, consolidation or capital reorganization in respect of the Shares subject immediately prior thereto to the Company's rights to repurchase pursuant to this Agreement.

12.7 The Company shall not be required to transfer any Shares on its books which shall have been sold, assigned or otherwise transferred in violation of this Agreement, or to treat as owner of such Shares, or to accord the right to vote as such owner or to pay dividends to, any person or organization to which any such Shares shall have been so sold, assigned or otherwise transferred, in violation of this Agreement.

12.8 The provisions of Sections 12.1, 12.2 and 12.3 shall terminate upon the effective date of the registration of the Shares pursuant to the Securities Exchange Act of 1934.

12.9 If, in connection with a registration statement filed by the Company pursuant to the 1933 Act, the Company or its underwriter so requests, the Participant will agree not to sell any Shares for a period not to exceed 180 days following the effectiveness of such registration.

12.10 The Participant acknowledges and agrees that neither the Company, its shareholders nor its directors and officers, has any duty or obligation to disclose to the Participant any material information regarding the business of the Company or affecting the value of the Shares before, at the time of, or following a termination of the employment of the Participant by the Company, including, without limitation, any information concerning plans for the Company to make a public offering of its securities or to be acquired by or merged with or into another firm or entity.

12.11 All certificates representing the Shares to be issued to the Participant pursuant to this Agreement shall have endorsed thereon a legend substantially as follows: "The shares represented by this certificate are subject to restrictions set forth in a Non-Qualified Stock Option Agreement dated _____, 200__ with this Company, a copy of which Agreement is available for inspection at the offices of the Company or will be made available upon request."

13. NO OBLIGATION TO MAINTAIN RELATIONSHIP.

The Company is not by the Plan or this Option obligated to continue the Participant as an employee, director or consultant of the Company or an Affiliate. The Participant acknowledges: (i) that the Plan is discretionary in nature and may be suspended or terminated by the Company at any time; (ii) that the grant of the Option is a one-time benefit which does not create any contractual or other right to receive future grants of options, or benefits in lieu of options; (iii) that all determinations with respect to any such future grants, including, but not limited to, the times when options shall be granted, the number of shares subject to each option, the option price, and the time or times when each option shall be exercisable, will be at the sole discretion of the Company; (iv) that the Participant's participation in the Plan is voluntary;

(v) that the value of the Option is an extraordinary item of compensation which is outside the scope of the Participant's employment contract, if any; and (vi) that the Option is not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments.

14. NOTICES.

Any notices required or permitted by the terms of this Agreement or the Plan shall be given by recognized courier service, facsimile, registered or certified mail, return receipt requested, addressed as follows:

If to the Company:

Metabolix, Inc.
21 Erie Street
Cambridge, MA 02139-4260
Attention:

If to the Participant:

---

or to such other address or addresses of which notice in the same manner has previously been given. Any such notice shall be deemed to have been given upon the earlier of receipt, one business day following delivery to a recognized courier service or three business days following mailing by registered or certified mail.

15. GOVERNING LAW.

This Agreement shall be construed and enforced in accordance with the law of the State of Delaware, without giving effect to the conflict of law principles thereof. For the purpose of litigating any dispute that arises under this Agreement, the parties hereby consent to exclusive jurisdiction in the Commonwealth of Massachusetts and agree that such litigation shall be conducted in the courts of Middlesex County, Massachusetts or the federal courts of the United States for the District of Massachusetts.

16. BENEFIT OF AGREEMENT.

Subject to the provisions of the Plan and the other provisions hereof, this Agreement shall be for the benefit of and shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

17. ENTIRE AGREEMENT.

This Agreement, together with the Plan, embodies the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersedes all prior oral or written agreements and understandings relating to the subject matter hereof. No statement, representation, warranty, covenant or agreement not expressly set forth in this Agreement shall affect or be used to interpret, change or restrict, the express terms and provisions of this Agreement, provided, however, in any event, this Agreement shall be subject to and governed by the Plan.

18. MODIFICATIONS AND AMENDMENTS.

The terms and provisions of this Agreement may be modified or amended as provided in the Plan.

19. WAIVERS AND CONSENTS.

Except as provided in the Plan, the terms and provisions of this Agreement may be waived, or consent for the departure therefrom granted, only by written document executed by the party entitled to the benefits of such terms or provisions. No such waiver or consent shall be deemed to be or shall constitute a waiver or consent with respect to any other terms or provisions of this Agreement, whether or not similar. Each such waiver or consent shall be effective only in

the specific instance and for the purpose for which it was given, and shall not constitute a continuing waiver or consent.

20. DATA PRIVACY.

By entering into this Agreement, the Participant: (i) authorizes the Company and each Affiliate, and any agent of the Company or any Affiliate administering the Plan or providing Plan recordkeeping services, to disclose to the Company or any of its Affiliates such information and data as the Company or any such Affiliate shall request in order to facilitate the grant of options and the administration of the Plan; (ii) waives any data privacy rights he or she may have with respect to such information; and (iii) authorizes the Company and each Affiliate to store and transmit such information in electronic form.

21. CONSENT OF SPOUSE.

If the Participant is married as of the date of this Agreement, the Participant's spouse shall execute a Consent of Spouse in the form of EXHIBIT B hereto, effective as of the date hereof. Such consent shall not be deemed to confer or convey to the spouse any rights in the Shares that do not otherwise exist by operation of law or the agreement of the parties. If the Participant marries or remarries subsequent to the date hereof, the Participant shall, not later than 60 days thereafter, obtain his or her new spouse's acknowledgement of and consent to the existence and binding effect of Section 12.2 of this Agreement by such spouse's executing and delivering a Consent of Spouse in the form of Exhibit B.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized officer, and the Participant has hereunto set his or her hand, all as of the day and year first above written.

METABOLIX, INC.

By:

Name:
Title:

Participant

EXHIBIT A

NOTICE OF EXERCISE OF NON-QUALIFIED STOCK OPTION

[FORM FOR UNREGISTERED SHARES]

To: Metabolix, Inc.

Ladies and Gentlemen:

I hereby exercise my Non-Qualified Stock Option to purchase _____ shares (the "Shares") of the common stock, $.01 par value, of Metabolix, Inc. (the "Company"), at the exercise price of $_____ per share, pursuant to and subject to the terms of that certain Non-Qualified Stock Option Agreement between the undersigned and the Company dated _____, 200_.

I am aware that the Shares have not been registered under the Securities Act of 1933, as amended (the "1933 Act"), or any state securities laws. I understand that the reliance by the Company on exemptions under the 1933 Act is predicated in part upon the truth and accuracy of the statements by me in this Notice of Exercise.

I hereby represent and warrant that (1) I have been furnished with all information which I deem necessary to evaluate the merits and risks of the purchase of the Shares; (2) I have had the opportunity to ask questions concerning the Shares and the Company and all questions posed have been answered to my satisfaction; (3) I have been given the opportunity to obtain any additional information I deem necessary to verify the accuracy of any information obtained concerning the Shares and the Company; and (4) I have such

knowledge and experience in financial and business matters that I am able to evaluate the merits and risks of purchasing the Shares and to make an informed investment decision relating thereto.

I hereby represent and warrant that I am purchasing the Shares for my own personal account for investment and not with a view to the sale or distribution of all or any part of the Shares.

I understand that because the Shares have not been registered under the 1933 Act, I must continue to bear the economic risk of the investment for an indefinite time and the Shares cannot be sold unless the Shares are subsequently registered under applicable federal and state securities laws or an exemption from such registration requirements is available.

I agree that I will in no event sell or distribute or otherwise dispose of all or any part of the Shares unless (1) there is an effective registration statement under the 1933 Act and applicable state securities laws covering any such transaction involving the Shares or (2) the Company receives an opinion of my legal counsel (concurred in by legal counsel for the

Company) stating that such transaction is exempt from registration or the Company otherwise satisfies itself that such transaction is exempt from registration.

I consent to the placing of a legend on my certificate for the Shares stating that the Shares have not been registered and setting forth the restriction on transfer contemplated hereby and to the placing of a stop transfer order on the books of the Company and with any transfer agents against the Shares until the Shares may be legally resold or distributed without restriction.

I understand that at the present time Rule 144 of the Securities and Exchange Commission (the "SEC") may not be relied on for the resale or distribution of the Shares by me. I understand that the Company has no obligation to me to register the sale of the Shares with the SEC and has not represented to me that it will register the sale of the Shares.

I understand the terms and restrictions on the right to dispose of the Shares set forth in the 2004 Employee, Director and Consultant Stock Plan and the Non-Qualified Stock Option Agreement, both of which I have carefully reviewed. I consent to the placing of a legend on my certificate for the Shares referring to such restriction and the placing of stop transfer orders until the Shares may be transferred in accordance with the terms of such restrictions.

I have considered the Federal, state and local income tax implications of the exercise of my Option and the purchase and subsequent sale of the Shares.

I am paying the option exercise price for the Shares as follows:

Please issue the stock certificate for the Shares (check one):

/ / to me; or

/ / to me and _____, as joint tenants with right of survivorship

and mail the certificate to me at the following address:

- ----------

- ----------

- ----------

My mailing address for shareholder communications, if different from the address listed above is:

- ----------

- ----------

- ----------

Very truly yours,

Participant (signature)

Print Name

Date

Social Security Number

EXHIBIT A

NOTICE OF EXERCISE OF NON-QUALIFIED STOCK OPTION

IMPORTANT NOTICE: This form of Notice of Exercise may only be used at such time as the Company has filed a Registration Statement with the Securities and Exchange Commission under which the issuance of the Shares for which this exercise is being made is registered and such Registration Statement remains effective.

TO: Metabolix, Inc.

Ladies and Gentlemen:

I hereby exercise my Non-Qualified Stock Option to purchase _____ shares (the "Shares") of the common stock, $.01 par value, of Metabolix, Inc. (the "Company"), at the exercise price of $_____ per share, pursuant to and subject to the terms of that certain Non-Qualified Stock Option Agreement between the undersigned and the Company dated _____, 200_.

I understand the nature of the investment I am making and the financial risks thereof. I am aware that it is my responsibility to have consulted with competent tax and legal advisors about the relevant national, state and local income tax and securities laws affecting the exercise of the Option and the purchase and subsequent sale of the Shares.

I am paying the option exercise price for the Shares as follows:

Please issue the Shares (check one):

/ / to me; or

/ / to me and_____, as joint tenants with right of survivorship,

at the following address:

My mailing address for shareholder communications, if different from the address listed above, is:

Very truly yours,

Participant (signature)

Print Name

Date

Social Security Number

EXHIBIT B

CONSENT OF SPOUSE

I, _____, spouse of _____, acknowledge that I have read the Non-Qualified Stock Option Agreement dated as of _____, 200__ (the "Agreement") to which this Consent is attached as Exhibit B and that I know its contents. Capitalized terms used and not defined herein shall have the meanings assigned to such terms in the Agreement. I am aware that by its provisions the Shares granted to my spouse pursuant to the Agreement are subject to a right of repurchase in favor of Metabolix, Inc. (the "Company") and that, accordingly, the Company has the right to repurchase up to all of the Shares of which I may become possessed as a result of a gift from my spouse or a court decree and/or any property settlement in any domestic litigation.

I hereby agree that my interest, if any, in the Shares subject to the Agreement shall be irrevocably bound by the Agreement and further understand and agree that any community property interest I may have in the Shares shall be similarly bound by the Agreement.

I agree to the repurchase right described in Section 12.2 of the Agreement and I hereby consent to the repurchase of the Shares by the Company and the sale of the Shares by my spouse or my spouse's legal representative in accordance with the provisions of the Agreement. Further, as part of the consideration for the Agreement, I agree that at my death, if I have not disposed of any interest of mine in the Shares by an outright bequest of the Shares to my spouse, then the Company shall have the same rights against my legal representative to exercise its rights of repurchase with respect to any interest of mine in the Shares as it would have had pursuant to the Agreement if I had acquired the Shares pursuant to a court decree in domestic litigation.

I AM AWARE THAT THE LEGAL, FINANCIAL AND RELATED MATTERS CONTAINED IN THE AGREEMENT ARE COMPLEX AND THAT I AM FREE TO SEEK INDEPENDENT PROFESSIONAL GUIDANCE OR COUNSEL WITH RESPECT TO THIS CONSENT. I HAVE EITHER SOUGHT SUCH GUIDANCE OR COUNSEL OR DETERMINED AFTER REVIEWING THE AGREEMENT CAREFULLY THAT I WILL WAIVE SUCH RIGHT.

Dated as of the _____ day of _____, 200__.

Print name:

Exhibit 10.15

EXECUTION COPY

METABOLIX, INC.
21 ERIE STREET, CAMBRIDGE, MASSACHUSETTS

TABLE OF CONTENTS

EXHIBITS

METABOLIX, INC.

21 ERIE STREET, CAMBRIDGE, MASSACHUSETTS

ARTICLE 1: BASIC TERMS

The following terms used in this Lease shall have the meanings set forth below.

DATE OF LEASE:	As of December 29, 2003
LANDLORD	21 Erie Realty Trust
TENANT	Metabolix, Inc., a Delaware corporation
GUARANTOR:	Not Applicable.
ADDRESS OF PROPERTY:	21 Erie Street, Cambridge, Massachusetts.
BUILDING AND PROPERTY:	The two story building containing approximately 48,627 rentable square feet ("BUILDING") in the City of Cambridge, Massachusetts, located on a parcel of land described in EXHIBIT A (the Building and such parcel of land being collectively referred to as the "PROPERTY").
PREMISES:	28,019 rentable square feet, consisting of 26,422 rentable square feet on the second floor of the Building (being all of the second floor) and 1,597 rentable square feet on the first floor of the building, each located as described in EXHIBIT B.
TENANT'S PRO RATA SHARE:	57.6%
TERM:	
Initial Term:	Ten (10) Lease Years from the Commencement Date.
Extension Term:	Two (2) extension terms of five (5) Lease Years.
Lease Year:	The first Lease Year begins at 12:01 a.m. on the Term Commencement Date and ends at 11:59 p.m. on the last day of the twelfth full calendar month after said Term Commencement Date. Each subsequent Lease Year ends at 11:59 p.m. twelve months after the preceding one Lease Year.
Estimated Delivery Date:	March 15, 2004
Term Commencement Date:	The Delivery Date as set forth in Section 3.01.
Rent Commencement Date:	The earlier of (a) two months after the Delivery Date (e.g. May 1, 2004, if the Delivery Date occurs on March 1, 2004) or (b) two months after the date upon which Tenant first occupies all or any portion of the Premises for the conduct of its business (e.g. April 15, 2004 if Tenant occupies a portion of the Premises for the conduct of its business on February 15, 2004).
PERMITTED USES:	Technical office for research and development, laboratory and research facility, and, as an ancillary use, limited manufacturing activity to the extent permitted under applicable zoning laws.
BROKER(S):	Richards Barry Joyce & Partners, LLC for the Tenant and CBRE Lynch Murphy Walsh Advisors for the Landlord.
MANAGEMENT COMPANY:	Hallkeen Management Group
SECURITY DEPOSIT:	$493,975 in the form of cash or an irrevocable

Letter of Credit as set forth in ARTICLE 15.

PARKING:	28 parking spaces as set forth in Section 2.01(e) at the rate of one (1) parking space(s) per 1,000 rentable square feet of the Premise.
BASE RENT:	
Initial Term:	$756,513 per annum ($27.00 per rentable square foot of the Premises), increased annually effective on the first day of each Lease Year to reflect increases, if any, on account of the CPI Adjustment as defined and described in Section 3.03(d).
Extension Term:	Base Rent per annum shall be the greater of (x) Market Rent, as determined pursuant to Section 3.03, or (y) the Base Rent immediately prior to the Extension Term as adjusted at the beginning of the Extension Term by the CPI Adjustment; but Base Rent in an Extension Term shall never be less than Base Rent paid in the Lease Year immediately prior to such Extension Term.
ADDITIONAL RENT:	All amounts payable by Tenant under this Lease other than Base Rent, including: Tenant's Pro Rata Share of Taxes (Article 5), utilities (Article 6), insurance premiums (Article 7) and other Operating Expenses (Article 8). (See Section 4.02)
ORIGINAL ADDRESS OF LANDLORD:	21 Erie Realty Trust c/o Lyme Properties, LLC 101 Main Street, 18th Floor Cambridge, MA 02142 Attn: David Clem and Robert L. Green With copies to: Piper Rudnick LLP One International Place 21st Floor Boston, MA 02110 Attn: Greg D. Peterson, Esq.
ORIGINAL ADDRESS OF TENANT:	Before Delivery Date: Metabolix, Inc.

	303 Third Street Cambridge, MA 02142 Attn: President After Delivery Date: At the Premises, Attn: President With copies to: Testa, Hurwitz & Thibeault, LLP 125 High Street Boston, MA 02110 Attn: Douglas M. Henry, Esq.
BASE BUILDING WORK:	As set forth in Section 10.03(a)
TENANT RELATED WORK	As set forth in Section 10.03(a)
EXHIBITS:	Exhibit A: Property Exhibit B: Premises Exhibit C: Form of Letter of Credit Exhibit D: Form of Confirmation of Delivery Date Exhibit E: Rules and Regulations Exhibit F: Environmental Substances

LIST OF CERTAIN DEFINED TERMS

ARTICLE 2: PREMISES AND APPURTENANT RIGHTS

2.01 LEASE OF PREMISES; APPURTENANT RIGHTS. Landlord hereby leases the Premises

to Tenant, and Tenant hereby leases the Premises from Landlord, for the Term. Subject to Landlord's reasonable rules of general applicability from time to time adopted and of which Tenant is given notice, Tenant shall have access to the Premises twenty-four (24) hours a day, seven (7) days a week. Landlord's initial rules are set forth in Exhibit E.

(a) EXCLUSIONS. The Premises exclude common areas and facilities of the Property, including without limitation exterior faces of exterior walls, the common stairways and stairwells, entranceways and the main lobby, elevators and elevator wells, fan rooms, electric and telephone closets, janitor closets, freight elevator vestibules, and pipes, ducts, conduits, wires and appurtenant fixtures serving other parts of the Property (exclusively or in common) and other common areas and facilities from time to time designated as such by Landlord. If the Premises include less than the entire rentable area of any floor, then the Premises also exclude the common corridors, elevator lobby and toilets located on such floor.

(b) APPURTENANT RIGHTS. Tenant shall have, as appurtenant to the Premises, rights to use in common with others (subject to reasonable rules of general applicability of which Tenant is given notice) the common areas and facilities of the Property.

(c) RESERVATIONS. In addition to other rights reserved herein or by law, Landlord reserves the right from time to time, without unreasonable (except in emergency) interruption of Tenant's use: (i) to make additions to or reconstructions of the Building (including without limitation the Base Building Work and tenant improvements in other premises within the Building) and to install, use, maintain, repair, replace and relocate for service to the Premises and other parts of the Building, or either, pipes, ducts, conduits, wires and appurtenant fixtures, wherever located in the Premises, the Building, or

elsewhere in the Property; (ii) to alter or relocate any other common area or facility, including the drives, lobbies and entrances and (iii) to grant easements and other rights with respect to the Property. Installations, replacements and relocations within the Premises referred to in clause (i) shall be located as far as practicable in the core areas of the Building, above ceiling surfaces, below floor surfaces or within perimeter walls of the Premises. Alterations, relocations or grants referred to in clauses (ii) and (iii) above shall neither have a material adverse effect on Tenant's access to the Premises, nor increase Tenant's Pro Rata Share. This Lease, and Tenant's leasehold interest in the Premises, are subject to, and with the benefit of, the terms, covenants and conditions of this Lease, and rights, agreements, easements and restrictions of record applicable to the Property, all of which Tenant shall perform and observe insofar as the same are applicable to the Premises; provided, however, that Tenant shall not be bound by any easements or restrictions made after the date of this Lease that materially affect Tenant's rights and obligations under this Lease unless and until Landlord has obtained Tenant's prior written consent thereto, which shall not be unreasonably withheld, conditioned or delayed. Landlord hereby represents and warrants that none of the existing agreements, easements and restrictions of record prohibit or restrict use of the Demised Premises for the Permitted Uses.

Landlord further reserves the right to develop additions and other improvements at the Property as it may determine in its discretion. This may entail subdivision of the Property, a separate ground lease of a portion of the Property, or creation of a condominium in a manner that allows development of any addition or other improvements as an independent project. This Lease shall be subject and subordinate to any such subdivision, ground lease, or condominium (and covenants and easements granted in connection therewith) so long as the same are not inconsistent in any material respect with Tenant's rights under this Lease or would not result in any increase in Tenant's Pro Rata Share.

Tenant agrees not to take any action to hinder or oppose any additional development at the Property proposed by Landlord so long as such additional development is not inconsistent in any material respect with Tenant's rights under this Lease or would result in an increase in Tenant's Pro Rata Share.

(d) PARKING. During the Term, Landlord shall provide Tenant with one parking pass for each of the number of parking spaces set forth in Article 1 for use at the garage located on the Property. Use of the parking spaces shall be on a non-exclusive, non-reserved basis. Tenant shall pay for such parking passes to such spaces (whether or not so used) at the then current prevailing monthly rate for garage parking spaces in the area, as reasonably determined by the Landlord from time to time. The current monthly rate for such parking is $200 per month per space. Such payments shall constitute Additional Rent for purposes of the Lease. Payments under this Section shall be made at the places and times and subject to the conditions specified for payments of Base Rent, or at such other places and times as Landlord shall specify in writing. To the extent

applicable to Tenant's

use of the parking spaces, the provisions of the Lease shall apply, including rules and regulations of general applicability from time to time promulgated by Landlord. Without limiting Landlord's other remedies under the Lease, if Tenant shall fail to pay the amounts due for such parking spaces for more than ten (10) days after written notice of such failure more than once in a twelve-month period, then Landlord may terminate Tenant's rights to such spaces immediately upon notice by Landlord.

The parking passes shall not be assigned or sublicensed except in connection with a Transfer permitted under Article 13. Tenant acknowledges that Landlord has informed Tenant that the parking garage may be available for transient parking and that, for the purpose of maximizing usage of the facility, Landlord may allocate in its tenant leases more than the actual parking spaces anticipated to be available to the Property. It is further acknowledged and agreed that as a consequence of such over-allocation of parking spaces and/or transient usage, there may occasionally occur instances in which the number of parking spaces actually available to Tenant shall be less than the Parking Spaces to which Tenant is entitled under this Lease. Landlord shall incur no liability to Tenant as a consequence of such events; provided, however, that if any passholder is denied entry to the parking garage more than two times in any calendar month, and further provided that Tenant gives written notice to Landlord within five days of each such occurrence, Landlord will refund one month's then-current parking space fee to Tenant.

ARTICLE 3: LEASE TERM

3.01 LEASE TERM; DELAY IN DELIVERY DATE. The Initial Term of this Lease is set forth in Article 1. Landlord shall use reasonable efforts to substantially complete the Tenant Related Work and deliver the Premises to Tenant on or before the Estimated Delivery Date. The "DELIVERY DATE" shall mean the date that Landlord delivers to Tenant a certificate of Landlord's architect stating that the Tenant Related Work is substantially complete, but in any event shall be no earlier than March 1, 2004. Promptly after the Delivery Date, Landlord and Tenant shall execute and deliver a Confirmation of Delivery Date in the form of EXHIBIT D, but Rent shall commence on the Rent Commencement Date whether or not such confirmation is executed. Landlord's failure to deliver the Premises to Tenant on or before the Estimated Delivery Date, for any reason, shall not give rise to any liability of Landlord hereunder, shall not constitute a Landlord's default, shall not affect the validity of this Lease, and shall have no effect on the beginning or end of the Term as otherwise determined hereunder or on Tenant's obligations associated therewith, but Tenant shall only commence paying Rent on the Rent Commencement Date.

3.02 HOLD OVER. If Tenant (or anyone claiming through Tenant) shall remain in occupancy of the Premises or any part thereof after the expiration or early termination of the Term without a written agreement therefor executed and delivered by Landlord, then without limiting Landlord's other rights and remedies the person remaining in possession shall be deemed a tenant at sufferance, and Tenant shall thereafter pay monthly rent (pro

rated for such portion of any partial month as Tenant shall remain in possession) at a rate equal to the greater of (a) 125% of the fair market rent then being quoted by Landlord for the Premises or comparable space in the Building, or (b) 150% of the amount payable as Base Rent for the 12-month period immediately preceding such expiration or termination, and in either case with all Additional Rent also payable as provided in this Lease. After Landlord's acceptance of the full amount of such rent for the first month of such holding over, the person remaining in possession shall be deemed a tenant at will at such rent and otherwise subject to all of the provisions of this Lease. Notwithstanding the foregoing, if Landlord desires to regain possession of the Premises promptly after the termination or expiration hereof and prior to acceptance of rent for any period thereafter, Landlord may, at its option, and if permitted pursuant to applicable law, forthwith re-enter and take possession of the Premises or any part thereof without process or by any legal process in force in the state where the Property is located. Notwithstanding the establishment of any holdover tenancy following the expiration or earlier termination of the Term, if Tenant fails promptly to vacate the Premises at the expiration or earlier termination of the Term, Tenant shall save Landlord harmless and indemnified against any claim, loss, cost or expense (including reasonable attorneys' fees) arising out of Tenant's failure promptly to vacate the Premises (or any portion thereof) and upon demand pay to Landlord any actual damages or loss incurred by Landlord as a result of any delayed or terminated lease of all or part of the Premises by another party.

3.03 RIGHT TO EXTEND.

3.03(a) EXTENSION TERM. The Term of this Lease of all of the Premises may be extended for two (2) additional five (5)-year periods (each, an "EXTENSION TERM") by unconditional written notice from Tenant to Landlord at least 18 months before the end of the then expiring Term, time being of the essence. If Tenant does not timely exercise this option, or if on the date of such notice, at the time that Landlord is obligated to provide Tenant with Landlord's determination of Market Rent as set forth in Section 3.03(b), below, or at the beginning of the Extension Term (i) a default exists beyond applicable notice and cure periods or (ii) Tenant has made any Transfer under Article 13 of more than fifty percent (50%) of the Premises in the aggregate, Tenant's right to extend shall irrevocably lapse, Tenant shall have no further right to extend, and this Lease shall expire at the end of the Initial Term.

All references to the Term shall mean the Initial Term as it may be extended by the Extension Term. The Extension Term shall be on all the same terms and conditions except that the Base Rent for the Extension Term shall be as set forth below.

3.03(b) EXTENSION TERM BASE RENT. Rent for each year of the applicable Extension Term shall be established as the higher of (x) one-hundred percent (100%) of the Market Rent or (y) the Base Rent in effect prior to such Extension Term and adjusted at the commencement of such Extension Term to reflect the CPI Adjustment; but Base Rent in an

Extension Term shall never be less than Base Rent paid prior to such Extension Term. If Tenant gives Landlord timely notice of its exercise of the Extension Term option, then Landlord shall give Tenant written notice of Landlord's determination of Market Rent for the Premises no later than the date that is 16 months before the end of the then-expiring Term. Within ten (10) days after Tenant receives such notice, Tenant shall notify Landlord of its agreement with or objection to Landlord's determination of the Market Rent, whereupon in the case of Tenant's objection, Market Rent shall be determined by arbitration conducted in the manner set forth below. If Tenant does not notify Landlord within such ten (10) day period of Tenant's agreement with or objection to Landlord's determination of the Market Rent, then the Market Rent for the Extension Term shall be deemed to be Landlord's determination of the Market Rent as set forth in Landlord's notice to Tenant.

3.03(c) ARBITRATION OF MARKET RENT. If Tenant timely notifies Landlord of Tenant's objection to Landlord's determination of Market Rent under the preceding subsection, such notice shall also set forth a request for arbitration and Tenant's appointment of a commercial real estate appraiser or broker having at least ten (10) years experience in the commercial leasing market in the municipality where the Premises are located (an "ARBITRATOR"). Within five (5) days thereafter, Landlord shall by notice to Tenant appoint a second Arbitrator. Each Arbitrator shall determine the Market Rent for the applicable Extension Term within thirty (30) days after Landlord's appointment of the second Arbitrator. On or before the expiration of such thirty (30) day period, the two Arbitrators shall confer to compare their respective determinations of the Market Rent. If the difference between the amounts so determined by the two Arbitrators is less than or equal to ten percent (10%) of the lower of said amounts then the final determination of the Market Rent shall be equal to the arithmetical average of said amounts. If such difference between said amounts is greater than ten percent (10%), then the two arbitrators shall within ten (10) days thereafter to appoint a similarly qualified third Arbitrator ("THIRD ARBITRATOR"), who shall determine the Market Rent for the applicable Extension Term within ten (10) days after his or her appointment by selecting one or the other of the amounts determined by the other two Arbitrators. Each party shall bear the cost of the Arbitrator selected by such party. The cost for the Third Arbitrator, if any, shall be shared equally by Landlord and Tenant.

"MARKET RENT" shall be the fair market rent that willing parties would pay and receive as the Base Rent to lease the Premises during the Extension Term under the terms and conditions of this Lease in the condition existing at the commencement of the Extension Term (or in such better condition as the same are required to be maintained hereunder). In making such determination, all relevant factors may be considered, but the Base Rent historically paid under this Lease shall be disregarded. Market Rent may include annual or periodic increases in the Base Rent rate if consistent with then prevailing market conditions.

3.03(d) CPI ADJUSTMENT. This Section 3.03(d) shall be used to calculate increases in Base Rent on account of increases in CPI during the Term of this

Lease. The Consumer Price Index for all Urban Wage Earners and Clerical Workers, All Items, for Boston, Massachusetts published by the Bureau of Labor Statistics of the United States Department of Labor (base year 1982-84 = 100) is the "CPI" If, at the commencement of an Extension Term or as of the commencement of the second, or any subsequent, Lease Year during the Term of this Lease, there is a change in the CPI (or any comparable successor or substitute index designated by the Landlord appropriately adjusted) reflecting an increase in the cost of living over and above the cost of living as reflected by the CPI for the month in which the Date of Lease occurs ("BASE PRICE INDEX"), the "CPI ADJUSTMENT" of the Base Rent shall be calculated as follows: the Base Rent shally be multiplied by a fraction, the numerator of which shall be the CPI for the month in which the Extension Term or Lease Year commences, as applicable, and the denominator of which shall be the Base Price Index. In the event the CPI ceases to use the 1982-84 average of 100 as the basis of calculation, or if a substantial change is made in the terms or number of items contained in the CPI, then the CPI shall be adjusted to the figure most nearly approximating that which would have been arrived at had the manner of computing the CPI in effect at the date of this Lease not been changed. In the event that within one (1) year following the date that the CPI figure for any month used in calculating the Adjustment shall have been published, the federal government shall revise such figure, then: (x) such revised CPI figure shall thereafter be deemed to be the correct CPI figure for all purposes (unless the federal government shall yet again revise such figure, in which case the most recently revised CPI figure shall be deemed to be correct); and (y) any retroactive adjustment or recomputation resulting from such revised CPI figure shall be limited to encompass only the year immediately preceding the date upon which the revision of such CPI figure shall have first been published.

3.03(e) RENT CONTINUATION. For any part of the Extension Term during which the Base Rent is in dispute or has otherwise not finally been determined, Tenant shall make payment on account of Base Rent at the rate estimated by Landlord, and the parties shall adjust for any overpayments or underpayments upon the final determination of Base Rent. The failure by the parties to complete the process contemplated under this Section prior to commencement of the Extension Term shall not affect the continuation of the Term or the parties' obligation to make any adjustments for any overpayments or underpayments for the Base Rent due for the Extension Term promptly after the determination thereof is made.

3.04 EARLY TERMINATION RIGHT. Tenant shall have the one-time right to terminate the term of this Lease during the Initial Term effective upon the date (the "EARLY TERMINATION DATE") that is later of (x) the last day of the fifth Lease Year or (y) the date that is nine months after the delivery by Tenant of written notice (a "TERMINATION NOTICE") to Landlord electing to terminate the Lease prior to the then-scheduled expiration date. The Termination Notice must be accompanied by a check payable to Landlord in an amount equal to one half of the sum of (A) the unamortized amount (i.e. the amount

allocable to the remainder of the initial term of the Lease following on and after the Early Termination Date) of (i) the Finish Work Allowance (as defined in Exhibit L) and (ii) the brokerage commissions paid by Landlord to the Brokers, in each case amortized in equal monthly installments that would be required to fully amortize the amount (without interest) over 120 months and (B) the product of the then-effective monthly Base Rent times the number of months remaining in the Initial Term as of the Early Termination Date divided by 15 ((A) and (B), together, the "TERMINATION PAYMENT"). An example of the calculation of the Termination Payment is set forth on EXHIBIT O. In no event shall the Termination Payment be equal to an amount less than two times the monthly Base Rent in effect at the time the Termination Notice is given. The other half of the Termination Payment shall be paid by Tenant to Landlord on or before the date that is 30 days, prior to the Early Termination Date, net of an amount equal to 50% of any cash Security Deposit then held by Landlord (provided that Tenant is not then in default under the lease and that Tenant has not elected to provide a Letter of Credit as security pursuant to Section 15.01), and Landlord shall be permitted to apply fifty percent (50%) of any cash Security Deposit then held by it towards the balance of the Termination Payment. Within 30 days after request by Tenant, which request shall indicate a projected Early Termination Date, Landlord shall notify Tenant of the amount of the Termination Payment that would be payable on such projected date, determined in accordance with this Section. A request for a determination by Landlord of the amount of a Termination Payment shall not constitute a Termination Notice. The Termination Payment shall be in addition to, and not in lieu of, Tenant's obligations to pay rent for the period ending on the Early Termination Date. Time is of the essence with regard to the provisions of this Paragraph.

Tenant's notice terminating the Lease shall be effective only if such notice is applicable to the entire Premises, is unconditional, is accompanied by one-half of the Termination Payment, and the remainder of the Termination

Payment is made in a timely manner. Once given, such termination notice shall be irrevocable. Notwithstanding the foregoing, any exercise by Tenant of its termination right under this Paragraph shall, at Landlord's election, be void if Tenant is in default hereunder continuing beyond applicable notice or cure period or an event or condition exists which with notice and the passage of time would constitute such a default, provided that, in either case, any such default is with respect to a payment of Rent or is on account of a breach of the terms and conditions of Section 9.04 or Section 13.01 of this Lease unless Tenant cures such default within the applicable cure period, if any, under this Lease (or unless Tenant otherwise provides Landlord with sufficient assurances, as determined in Landlord's sole discretion, that Tenant will complete such cure), either at the time Tenant elects to terminate the Lease or at the time the Lease would be terminated pursuant to Tenant's election to terminate. If Tenant exercises its termination right hereunder, (a) Tenant's extension option under Section 3.03 and rights pursuant to Article 18 shall be null and void, and (b) Tenant shall peaceably surrender the Premises to Landlord on or before the Early Termination Date in accordance with the applicable provisions of the Lease.

ARTICLE 4: RENT

4.01 BASE RENT. On the Rent Commencement Date and thereafter on the first day of each month during the Term, Tenant shall pay Landlord the monthly installment of Base Rent and the monthly installment of Tenant's Pro Rata Share of Total Operating Costs required by Section 4.02, in each case in advance. Rent shall be payable at Landlord's address or otherwise as Landlord may designate in writing from time to time.

4.02 ADDITIONAL RENT.

4.02(a) GENERAL. "RENT" means Base Rent and Additional Rent. Landlord shall estimate in advance (i) all Taxes under Article 5, (ii) all utility costs (unless separately metered to or separately contracted for by Tenant) under Article 6, (iii) all insurance premiums to be paid by Landlord under Article 7, and (iv) all Operating Expenses under Section 8.04 (individually all such items in clauses (i) through (iv) being "OPERATING COSTS" and collectively being "TOTAL OPERATING COSTS") and Tenant shall pay one-twelfth of Tenant's Pro Rata Share of such estimated Total Operating Costs monthly in advance together with Base Rent. Landlord may adjust its estimates of Total Operating Costs at any time based upon its experience and reasonable anticipation of costs. Such adjustments shall be effective as of the next Rent payment date after notice to Tenant. Within one hundred twenty (120) days after the end of each fiscal year of the Property during the Term, Landlord shall endeavor to give to Tenant a reasonably detailed statement of the Total Operating Costs paid or incurred by Landlord during the preceding fiscal year and Tenant's Pro Rata Share of such expenses. Within the next thirty (30) days, Tenant shall pay Landlord any underpayment, or Landlord shall credit Tenant with any overpayment, of Tenant's Pro Rata Share of such Total Operating Costs. If the Term expires or the Lease is terminated as of a date other than the last day of a fiscal year, Tenant's payment of Additional Rent pursuant to this Section for such partial fiscal year shall be based on Landlord's best estimate of the items otherwise includable in Total Operating Costs and shall be made on or before the later of (a) ten (10) days after Landlord delivers such estimate to Tenant or (b) the last day of the Term, with an appropriate payment or refund to be made upon Tenant's receipt of Landlord's statement of Total Operating Costs for such fiscal year. This Section shall survive the expiration or earlier termination of the Term.

At the request of Tenant given within thirty (30) days after Landlord delivers Landlord's statement of Total Operating Costs, Tenant (at Tenant's expense) shall have the right to examine Landlord's books and records applicable to Total Operating Costs for such fiscal year. Such right to examine the records shall be exercisable: (i) upon reasonable advance notice to Landlord and at reasonable times during Landlord's business hours; and (ii) only during the 120-day period following Tenant's receipt of statement of Total Operating Costs for the applicable fiscal year. In the event (i) an audit of Landlord's Total Operating Costs for such year, conducted by an independent certified public accountant retained by Tenant or an auditing firm approved by Landlord for such purpose,

indicates that certain items were improperly included in Landlord's Total Operating Costs and resulted in an overcharge to Tenant and (ii) an independent certified public accountant retained by Landlord at Landlord's expense agrees with the results of said audit, then Landlord shall refund the overage to Tenant. Tenant's auditing firm shall be subject to the prior approval of Landlord, which approval may be granted or denied in Landlord's reasonable discretion, and shall not be compensated on a contingent fee basis.

Notwithstanding the foregoing, Tenant's request to audit Landlord's books and records shall not extend the time within which Tenant is obligated to pay the amounts shown on Landlord's statement of Total Operating Costs, and Tenant may not make the request to audit Landlord's books and records at any time Tenant is in default of such payments or otherwise in default beyond applicable notice and cure periods under the Lease. In the event the audit determines that Tenant has been overcharged by 10% or more of the Additional Rent due with respect to Total Operating Costs, Landlord shall pay for the cost of said audit and/or the arbitration. In all other cases, Tenant shall pay for the cost of said audit and/or the arbitration.

As a condition precedent to performing any such examination of Landlord's books and records, Tenant and its examiners shall be required to execute and deliver to Landlord an agreement in form acceptable to Landlord agreeing to keep confidential any information that they discover about Landlord or the Building or the Property in connection with such examination. Without limiting the foregoing, such examiners shall also be required to agree that they will not represent any other tenant in the Building or the Property in connection with examinations of Landlord's books and records for the Building unless said tenant(s) have retained said examiners prior to the date of the first examination of Landlord's books and records conducted by Tenant pursuant to this Section 8.01 have been continuously represented by such examiners since that time. Notwithstanding any prior approval of any examiners by Landlord, Landlord shall have the right to rescind such approval at any time if in Landlord's reasonable judgment the examiners have breached any confidentiality undertaking to Landlord or cannot provide acceptable assurances and procedures to maintain confidentiality.

This Lease requires Tenant to pay directly to suppliers, vendors, carriers, contractors, etc., certain insurance premiums, utility costs, personal property taxes, maintenance and repair costs and other expenses. If Landlord pays any of these amounts in accordance with this Lease, Tenant shall, upon invoice from Landlord, reimburse such costs in full with the next monthly Rent payment. Unless this Lease provides otherwise, Tenant shall pay all Additional Rent then due on or before the date for the next monthly Rent payment.

4.02(b) ALLOCATION OF CERTAIN OPERATING COSTS. If at any time during the Term, Landlord provides services only with respect to particular portions of the Building or incurs other Operating Costs allocable to particular portions of the Building, then such Operating Costs shall be charged entirely to those tenants, including Tenant, if applicable, of such

portions, notwithstanding the provisions hereof referring to Tenant's Pro Rata Share. If, during any period for which Landlord's Operating Costs are being computed, less than all of the Building is occupied by tenants, or if Landlord is not supplying all tenants with the services being supplied hereunder, Operating Costs shall be reasonably estimated and extrapolated by Landlord to determine the Operating Costs that would have been incurred if the Building were fully occupied for such year and such services were being supplied to all tenants, and such estimated and extrapolated amount shall be deemed to be the Operating Costs for such period.

4.03 LATE CHARGE. Tenant acknowledges that if it pays Rent late, Landlord shall incur unanticipated costs, which shall be extremely difficult to ascertain exactly. Such costs include processing and accounting charges, and late charges that may be imposed on Landlord by any mortgage on the Property. Accordingly, if Landlord does not receive any Rent payment within five (5) days following its due date, Tenant shall pay Landlord a late charge equal to three (3%) percent of the overdue amount (provided that no such late charge shall be due with respect to the first late payment of Rent in any 12 month period unless and until Landlord gives Tenant notice of such late payment). The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord shall incur by reason of Tenant's payment default. Payment of the late charge shall not cure Tenant's payment default or prevent Landlord from exercising other rights and remedies.

4.04 INTEREST. Any late Rent shall bear interest from the date due until paid at the rate of 12% per annum, except to the extent such interest would cause the total interest to be in excess of that legally permitted. Payment of interest shall not cure Tenant's payment default or prevent Landlord from exercising other rights and remedies.

4.05 METHOD OF PAYMENT. Tenant shall pay the Base Rent to Landlord in advance in equal monthly installments by the first of each calendar month during the Term. Tenant shall make a ratable payment of Base Rent and Additional Rent for any period of less than a month at the beginning or end of the Term. All payments of Base Rent, Additional Rent and other sums due shall be paid in current U.S. exchange by check drawn on a clearinghouse bank at the Original Address of

Landlord or such other place as Landlord may from time to time direct, without demand, set-off or other deduction.

Without limiting the foregoing, Tenant's obligation so to pay Rent shall be absolute, unconditional, and independent and shall not be discharged or otherwise affected by any law or regulation now or hereafter applicable to the Premises, or any other restriction on Tenant's use, or, except as expressly provided in herein, any casualty or taking, or any failure by Landlord to perform or other occurrence; and Tenant assumes the risk of the foregoing and waives all rights now or hereafter existing to terminate or cancel this Lease or quit or surrender this Lease or the Premises or any part thereof, or to assert any defense in the nature of constructive eviction to any action seeking to recover Rent. Subject to the provisions of this Lease, however, Tenant shall have the right to seek

judgments for direct money damages occasioned by Landlord's breach of its Lease covenants (but may not set-off any such judgment against any Rent or other amount owing hereunder).

It is intended that Base Rent payable hereunder shall be a net return to Landlord throughout the Term, free of expense, charge, offset, diminution or other deduction whatsoever on account of the Premises (excepting Landlord's financing expenses, federal and state income taxes of general application, and those expenses that this Lease expressly makes the responsibility of Landlord), and all provisions hereof shall be construed in terms of such intent.

4.06 TENANT'S PRO RATA SHARE Tenant's Pro Rata Share is calculated by dividing the rentable square foot area on the Premises by the rentable square foot area of the Building, as of the date of the computation. Tenant's Pro Rata Share initially as set forth in Article 1 is subject to adjustment by Landlord if the rentable square footages of the Premises or the Building changes. At all times during the Lease Term, Tenant's Pro Rata Share of Total Operating Costs shall be calculated as if the Building were 100% occupied at all times during the Lease Term.

ARTICLE 5: TAXES

5.01 TAXES. Tenant covenants and agrees to pay to Landlord as Additional Rent Tenant's Pro Rata Share of the Taxes for each fiscal tax period, or ratable portion thereof, included in the Lease Term. If Landlord receives a refund of any such Taxes, Landlord shall pay Tenant Tenant's Pro Rata Share of the refund after deducting Landlord's reasonable costs and expenses incurred in obtaining the refund (unless such amounts have previously been included in Taxes pursuant to Section 5.02, below). Tenant shall make estimated payments on account of Taxes in monthly installments on the first day of each month, in amounts reasonably estimated from time to time by Landlord pursuant to Section 4.02(a).

5.02 DEFINITION OF "TAXES". "TAXES" means all taxes, assessments, betterments, excises, user fees and all other governmental charges and fees of any kind or nature, or impositions or agreed payments in lieu thereof or voluntary payments made in connection with the provision of governmental services or improvements of benefit to the Building or the Property (including any so-called linkage, impact, or voluntary betterment payments), and all penalties and interest thereon (if due to Tenant's failure to make timely payments), assessed or imposed against the Premises or the property of which the Premises are a part (including without limitation any personal property taxes levied on such property or on fixtures or equipment used in connection therewith), other than a federal or state income tax of general application. If during the Term the present system of ad valorem taxation of property shall be changed so that, in lieu of or in addition to the whole or any part of such ad valorem tax there shall be assessed, levied or imposed on such property or Premises or

on Landlord any kind or nature of federal, state, county, municipal or other governmental capital levy, income, sales, franchise, excise or similar tax, assessment, levy, charge or fee (as distinct from the federal and state income tax in effect on the Date of Lease) measured by or based in whole or in part upon Building valuation, mortgage valuation, rents, services or any other incidents, benefits or measures of real property or real property operations, then any and all of such taxes, assessments, levies, charges and fees shall be included within the term of Taxes. Taxes shall also include reasonable expenses, including fees of attorneys, appraisers and other consultants, incurred in connection with any efforts to obtain abatements or reduction or to assure maintenance of Taxes for any year wholly or partially included in the Term, whether or not successful and whether or not such efforts involved filling of actual abatement applications or initiation of formal proceedings.

5.03 PERSONAL PROPERTY TAXES. Tenant shall pay directly all taxes charged against Tenant Property (as defined in Section 10.06). Tenant shall use reasonable efforts to have Tenant Property taxed separately from the Property. Landlord shall notify Tenant if any of Tenant Property is taxed with the Property, and Tenant shall pay such taxes to Landlord within fifteen (15) days of such notice.

ARTICLE 6: UTILITIES

6.01 UTILITY SERVICES. Tenant shall pay all charges for water, sewer, gas, and electricity ("UTILITY SERVICE") and any other utilities or like services used or consumed on the Premises, whether called use charge, tax, assessment, fee or otherwise as the same become due. It is understood and agreed that Landlord shall be responsible for bringing Utility Service to common switching point(s) at the Building (collectively, "UTILITY SWITCHING POINTS"). Landlord shall install, at its sole cost or expense, either separate meters serving the Premises or sub- or "check" meters for measuring Tenant's consumption of any Utility Services. Tenant shall pay all costs and expenses associated with any separately metered utilities (such as telephone) provided exclusively to the Premises directly to the applicable service provider. Tenant shall pay all costs and expenses associated with utility charges that are based on a sub-metering or check metering installation directly to Landlord. With respect to any utilities that are sub-metered or check metered, Tenant's consumption shall be reasonably estimated by Landlord. Additional Rent for such utilities may be estimated monthly by Landlord and shall be paid monthly by Tenant as billed with a final accounting based upon actual bills following the conclusion of each fiscal year of the Building. Tenant shall pay for any and all costs to install and connect Utility Services from the Utility Switching Points to the Premises. Landlord shall be under no obligation as to any Utility Services beyond the foregoing responsibility to bring such Utility Services to the Utility Switching Points and Landlord shall not be liable for any interruption or failure in the supply of any utilities or Utility Services.

To the extent permitted by law, Landlord shall have the right at any time and from time to time during the Term to contract for or purchase one or more Utility Services from

any company or third party providing Utility Services (provided that any such services supplied by an affiliate of Landlord shall be at competitive rates with other providers) ("UTILITY SERVICE PROVIDER"). Tenant agrees reasonably to cooperate with Landlord and the Utility Service Providers and at all times as reasonably necessary, and on reasonable advance notice, shall allow Landlord and the Utility Service Providers reasonable access to any utility lines, equipment, feeders, risers, fixtures, wiring and any other such machinery or personal property within the Premises and associated with the delivery of Utility Services.

ARTICLE 7: INSURANCE

7.01. COVERAGE. Tenant shall maintain during the Term insurance for the benefit of Tenant and Landlord (as their interests may appear) from insurers rated at least A-/X by A. M. Best, with terms and coverages reasonably satisfactory to Landlord, and with such increases in limits from time to time as may be required by institutional real estate lenders in similar buildings in Cambridge, Massachusetts. Initially, Tenant shall maintain the following on an occurrence basis:

(i) Commercial general liability insurance, using an ISO Occurrence Form, naming Landlord, Landlord's management, leasing and development agents and Landlord's mortgagee(s) from time to time as additional insureds, with coverage for premises/operations, personal injury, products/completed operations, independent contractors, and contractual liability with combined single limits of liability of not less than $3,000,000 for bodily injury and property damage per occurrence. Limits can be achieved by an underlying General Liability policy and an Umbrella Liability policy, provided the terms of the Umbrella policy are at least as broad as the underlying policy.

(ii) Property insurance covering property damage and business income/extra expense. Covered property shall include all tenant improvements in the Premises (including any Finish Work or other Tenant Work), and all other items of Tenant Property. Such insurance, with respect only to tenant improvements, shall name Landlord and Landlord's mortgagees from time to time as additional loss payees as their interests may appear. Such insurance shall be written on a special perils of physical loss or damage basis including but not limited to the perils of fire, extended coverage, windstorm, vandalism, malicious mischief, sprinkler leakage, flood, earth movement, and including comprehensive boiler and machinery (equipment breakdown) for the full replacement cost value of the covered items

with coinsurance waived by the inclusion of Agreed Amount, with a deductible not to exceed $10,000. Tenant shall maintain Business Income/Extra Expense at limits sufficient to cover the costs of operations for not less than six (6) months.

(iii) Workers' compensation insurance with statutory benefits and employers' liability insurance in the following amounts: each accident, $500,000; disease (policy limit), $500,000; disease (each employee), $500,000.

Prior to the Term Commencement Date and on each anniversary of that date (or on the policy renewal date), Tenant shall give Landlord certificate(s) evidencing such coverage and stating that it may not be changed or canceled without at least thirty (30) days' prior written notice to Landlord and Tenant. Insurance maintained by Tenant shall be deemed to be primary insurance, and any insurance maintained by Landlord shall be deemed secondary to it.

7.02 AVOID ACTION INCREASING RATES. Tenant shall comply with Sections 9.01, 9.02, 9.03, and 9.04 and in addition shall not, directly or indirectly, use the Premises in any way that is prohibited by law or dangerous to people or property or which may jeopardize or increase the cost of any insurance coverage or require additional insurance. Tenant shall cure any breach of this Section within ten (10) days after notice from Landlord by (i) stopping any use that jeopardizes any insurance coverage or increases its cost and (ii) paying the increased cost of insurance (provided that Landlord shall cooperate with Tenant, at no out-of-pocket cost to Landlord, to attempt to eliminate any such increased cost if Tenant stops such use promptly after notice from Landlord). Tenant shall have no further notice or cure right under Article 14 for any such breach. Tenant shall reimburse Landlord for all of Landlord's costs incurred in providing any insurance that is attributable to any special endorsement or increase in premium resulting from the business or operations of Tenant, and any special or extraordinary risks or hazards resulting therefrom, including without limitation, any risks or hazards associated with the generation, storage and disposal of medical waste.

7.03 WAIVER OF SUBROGATION. Landlord and Tenant each waive any and every claim for recovery from the other for any and all loss of or damage to the Property or any part of it, or to any of its contents, which loss or damage is covered by valid and collectible property insurance. Landlord waives any and every such claim against Tenant that would have been covered had the insurance policies required to be maintained by Landlord by this Lease been in force, to the extent that such loss or damage would have been recoverable under such policies. Tenant waives any and every such claim against Landlord that would have been covered had the insurance policies required to be maintained by Tenant under this Lease been in force, to the extent that such loss or damage would have been recoverable under such policies. This mutual waiver precludes the assignment of any such claim by subrogation (or otherwise) to an insurance company (or any other person), and Landlord and Tenant each agree to give written notice of this waiver to each insurance company that has issued or shall issue any property insurance policy to it, and to have the policy properly endorsed, if necessary, to prevent invalidation of the insurance coverage because of this waiver.

7.04 LANDLORD'S INSURANCE. Landlord shall purchase and maintain during the Term with insurance companies qualified to do business in the state where the Property is located insurance that may include the following: (i) commercial general liability insurance for

incidents occurring in the common areas, with coverage for premises/operations, personal and advertising injury, products/completed operations and contractual liability with combined single limits of liability of not less than $5,000,000 for bodily injury and property damage per occurrence, together with such other coverages and risks as Landlord shall reasonably decide or a mortgagee may require; and (ii) property insurance covering property damage to the Building, excluding any Tenant Work, and loss of rental income, on an "all risk" of physical loss or damage basis, for full replacement cost value of the Building, with co-insurance waived by inclusion of an agreed amount endorsement together with such other coverages and risks as Landlord shall reasonably decide or a mortgagee or a ground lessor may require. As set forth in Section 4.02, the cost thereof shall be borne by Tenant and other tenants. Landlord may use blanket or excess umbrella coverage to satisfy any of the requirements in this Section 7.04. As set forth in Section 4.02, the cost thereof shall be borne by Tenant and other tenants.

ARTICLE 8: COMMON EXPENSES

8.01 OPERATING EXPENSES. "OPERATING EXPENSES" shall mean all costs and expenses

associated with the ownership, operation, maintenance and repair of the Property and of all heating, ventilating, air conditioning, plumbing, electrical, utility and safety systems for the Building. Operating Expenses include without limitation the costs and expenses incurred in connection with the following: compliance with Landlord's obligations under Section 10.03(b); planting and landscaping; snow removal; utility, water and sewage services; maintenance of signs; supplies, materials and equipment purchased or rented, total wage and salary costs paid to, and all contract payments made on account of, all persons to the extent engaged in the operation, maintenance, security, cleaning and repair of the Property, including Social Security, old age and unemployment taxes and so-called "fringe benefits"; services generally furnished to all tenants of the Property; maintenance, repair and replacement of Building equipment and components; utilities consumed and expenses incurred in the operation, maintenance and repair of the Property; costs incurred by Landlord to comply with the terms and conditions of any changes in the governmental approvals affecting operations of the Property existing as of the date of this Lease; workers' compensation insurance and property, liability and other insurance premiums; personal property taxes; rental or lease payments paid by Landlord for rented or leased personal property used in the operation or maintenance of the Property; fees for required licenses and permits; maintenance and repair of the parking garage and paving (including sweeping, striping, repairing, resurfacing, and repaving); refuse removal; security; and property management fees, which fees shall not exceed a commercially reasonable amount or, if such management is provided by an affiliate of Landlord, three percent (3%) of gross income from the Property. Landlord may use third parties or affiliates to perform any of these services, and the cost thereof shall be included in Operating Expenses. Costs referred to in this Section shall be ascertained in accordance with generally accepted accounting principles, and allocated to appropriate fiscal periods on the accrual method of accounting. Specifically, any capital expenditures for installation of capital items shall be amortized

(with interest at Landlord's cost of funds) over the useful life of the capital item installed. Landlord shall make a reasonable allocation of the cost of any Operating Expenses incurred jointly for the Property and any other property.

Operating Expenses shall not include: the cost of performing Landlord's obligations under Section 10.03(a); the cost of casualty repairs to the extent covered by insurance, (except for reasonable deductibles paid by Landlord under insurance policies maintained by Landlord); costs associated with the operation of the business of Landlord and/or the sale and/or financing of the Property, as distinguished from the cost of Property operations, maintenance and repair; and costs of disputes between Landlord and its employees, tenants or contractors. In addition, Operating Expenses shall not include the cost of Base Building Work, including the Tenant Related Work; capital expenditures for additional improvements at the Property that result in a material increase in the rentable square footage of the Property; interest or principal payments on any mortgage encumbering the Property; depreciation of the Property; advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in leasing space to tenants for the Property; legal and other expenses incurred in the negotiation or enforcement of leases; work done for specific tenants of the Property, not for all tenants of the Property in general; the cost of utilities outside normal business hours sold to specific tenants of the Property; costs incurred in the sale or refinancing of the Property; and any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants under leases for space in the Property.

Tenant shall pay Tenant's Pro Rata Share of Operating Expenses in accordance with Section 4.02.

ARTICLE 9: USE OF PREMISES

9.01 PERMITTED USES. Tenant may use the Premises only for the Permitted Uses described in Article 1. Tenant shall keep the Premises equipped with appropriate safety appliances to the extent required by applicable laws or insurance requirements.

9.02 INDEMNIFICATION. Tenant shall assume exclusive control of all areas of the Premises, including all improvements, utilities, equipment, and facilities therein. Tenant is responsible for the Premises and any Tenant's improvements, equipment, facilities and installations, wherever located on the Property and all liabilities, including without limitation tort liabilities, incident thereto. Tenant shall indemnify, save harmless and defend Landlord and Landlord's members, managers, officers, mortgagees, agents, employees, independent contractors, invitees and other persons acting under them (collectively, "INDEMNITEES") from and against all liability, claim or cost (including reasonable attorneys' fees) arising in whole or in part out of (i) any injury, loss, theft or damage (except to the extent due to the gross

negligence or willful misconduct of Landlord or its employees) to any person or property while on or about the Premises or the Property;

(ii) any condition within the Premises or, to the extent caused by Tenant, the Property; (iii) failure to comply with any Lease covenant by Tenant; (iv) the use of the Premises or the Property by, or any act or omission of, Tenant or persons claiming by, through or under Tenant, or any of its agents, employees, independent contractors, suppliers or invitees; or (v) any labor disharmony with workers employed by Landlord to undertake the Base Building Work or other work at the Property undertaken by Landlord, from time to time, caused by Tenant or any Tenant Contractor, including without limitation coordination difficulties, or delays to or impairing of any guaranties, warranties or the work of any other contractor, in each use paying any cost to Landlord on demand as Additional Rent. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

9.03 COMPLIANCE WITH LEGAL REQUIREMENTS. Tenant shall not cause or permit the Premises or the Property to be used in any way that violates any law, code, ordinance, restrictive covenant, encumbrance, governmental regulation, order, permit, approval or any provision of the Lease (each a "LEGAL REQUIREMENT"), annoys or interferes with the rights of tenants of the Property, or constitutes a nuisance or waste. Tenant shall obtain and pay for all permits and shall promptly take all actions necessary to comply with all Legal Requirements, including without limitation the Occupational Safety and Health Act, applicable to Tenant's use of the Premises. Tenant shall maintain in full force and effect all certifications or permissions to provide its services required by any authority having jurisdiction to authorize, franchise or regulate such services. Tenant shall be solely responsible for procuring and complying at all times with any and all necessary permits directly relating or incident to: the conduct of its activities on the Premises; its scientific experimentation, transportation, storage, handling, use and disposal of any chemical or radioactive or bacteriological or pathological substances or organisms or other hazardous wastes or environmentally dangerous substances or materials or medical waste. Within ten (10) days of a request by Landlord, which request shall be made not more than once during each period of twelve (12) consecutive months during the Term hereof, unless otherwise requested by any mortgagee of Landlord, Tenant shall furnish Landlord with copies of all such permits that Tenant possesses or has obtained together with a certificate certifying that such permits are all of the permits that Tenant possesses or has obtained with respect to the Premises. Tenant shall promptly give notice to Landlord of any warnings or violations relative to the above received from any federal, state, or municipal agency or by any court of law and shall promptly cure the conditions causing any such violations. Tenant shall not be deemed to be in default of its obligations under the preceding sentence to promptly cure any condition causing any such violation in the event that, in lieu of such cure, Tenant shall contest the validity of such violation by appellate or other proceedings permitted under applicable law, provided that: (i) any such contest is made reasonably and in good faith, (ii) Tenant makes provisions, including, without limitation, posting bond(s) or giving other security, acceptable to Landlord to protect Landlord, the Building and the Property from any liability, costs, damages or expenses arising in connection with such violation and failure to cure, (iii) Tenant shall agree to indemnify, defend (with counsel reasonably acceptable to Landlord) and hold Landlord harmless from and against any and all liability,

costs, damages, or expenses arising in connection with such condition and/or violation, (iv) Tenant shall promptly cure any violation in the event that its appeal of such violation is overruled or rejected, and (v) Tenant shall certify to Landlord's satisfaction that Tenant's decision to delay such cure shall not result in any actual or threatened bodily injury or property damage to Landlord, any tenant or occupant of the Building or the Property, or any other person or entity. Landlord covenants that, upon completion of the Base Building Work, the common areas of the Building shall comply with the provisions of the Americans with Disabilities Act of 1990, 42 U.S.C. Section 12101 ET SEQ., as then in effect.

9.04 ENVIRONMENTAL SUBSTANCES. "ENVIRONMENTAL LAW" means all statutes, laws, rules, regulations, codes, ordinances, standards, guidelines, authorizations and orders of federal, state and local public authorities pertaining to any of the Environmental Substances or to environmental compliance, contamination, cleanup or disclosures of any release or threat of release to the environment, of any hazardous, biological, chemical, radioactive or toxic substances, wastes or materials, any pollutants or contaminants which are included under or regulated by any municipal, county, state or federal statutes, laws, rules, regulations, codes, ordinances, standards, guidelines, authorizations or orders, including, without limitation, the Toxic Substances Control Act, 15 U.S.C. Section 2601, ET

SEQ.; the Clean Water Act, 33 U.S.C. Section 1251, ET SEQ.; the Clean Air Act, 42 U.S.C. Section 7401, ET SEQ.; the Safe Drinking Water Act, 42 U.S.C. Section 300f-300j, ET SEQ.; the Federal Water Pollution Control Act, 33 U.S.C. Section 1321, ET SEQ.; the Solid Waste Disposal Act, 42 U.S.C Section 6901, ET SEQ.; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. Section 9601 ET SEQ.; the Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 ET SEQ.; the Superfund Amendments and Reauthorization Act of 1986, Public Law No. 99-499 (signed into law October 17, 1986); M.G.L. c.21C; and oil and hazardous materials as defined in M.G.L. c.21E, as any of the same are from time to time amended, and the rules and regulations promulgated thereunder, and any judicial or administrative interpretation thereof, including any judicial or administrative orders or judgments, and all other federal, state and local statutes, laws, rules, regulations, codes, ordinances, standards, guidelines, authorizations and orders regulating the generation, storage, containment or disposal of any Environmental Substances, including but not limited to those relating to lead paint, radon gas, asbestos, storage and disposal of oil, biological, chemical, radioactive and hazardous wastes, substances and materials, and underground and above ground oil storage tanks; and any amendments, modifications or supplements of any of the foregoing.

"ENVIRONMENTAL SUBSTANCES" means, but shall not be limited to, any hazardous substances, hazardous waste, environmental, biological, chemical, radioactive substances, oil or petroleum products and any waste or substance, which because of its quantitative concentration, chemical, biological, radioactive, flammable, explosive, infectious or other characteristics, constitutes or may reasonably be expected to constitute or contribute to a danger or hazard to public health, safety or welfare or to the environment, including without limitation any asbestos (whether or not friable) and any asbestos-containing

materials, lead paint, waste oils, solvents and chlorinated oils, polychlorinated biphenyls (PCBs), toxic metals, etchants, pickling and plating wastes, explosives, reactive metals and compounds, pesticides, herbicides, radon gas, urea formaldehyde foam insulation and chemical, biological and radioactive wastes, or any other similar materials that are mentioned under or regulated by any Environmental Law; and the regulations adopted under these acts, and including any other products or materials subsequently found by an authority of competent jurisdiction to have adverse effects on the environment or the health and safety of persons.

Tenant shall neither cause or permit any Environmental Substances to be generated, produced, brought upon, used, stored, treated or disposed of in or about or on the Building by Tenant, nor permit or suffer persons acting under Tenant, to do the same, whether with or without negligence, without (i) Landlord's prior written consent and (ii) complying with all applicable Environmental Laws and Legal Requirements pertaining to the transportation, storage, use or disposal of such Environmental Substances, including obtaining proper permits. Landlord may take into account any factors or facts that Landlord reasonably believes relevant in determining whether to grant its consent. Landlord consents to Tenant's use of the Environmental Substances listed in EXHIBIT F. From time to time at Landlord's request, Tenant shall execute affidavits, representations and the like concerning Tenant's best knowledge and belief regarding the presence or absence of Environmental Substances on the Premises or the Property. Tenant agrees to pay the cost of any environmental inspection or assessment requested by any lender that holds a security interest in the Property or this Lease, or by any insurance carrier, to the extent that such inspection or assessment pertains to any release, contamination, loss or damage or determination of condition in the Premises.

If any transportation, storage, use or disposal of Environmental Substances on or about the Property by Tenant, its agents, employees, independent contractors, or invitees results in any escaped, or release, threat of release, contamination of the soil or surface or ground water or any loss or damage to person or property, Tenant agrees to: (a) notify Landlord immediately of the occurrence; (b) after consultation with Landlord, clean up the occurrence in full compliance with all applicable statutes, regulations and standards and (c) indemnify, defend and hold Landlord, and the Indemnitees harmless from and against any claims, suits, causes of action, costs and fees, including attorneys' fees and costs, arising from or connected with any such occurrence. In the event of such occurrence, Tenant agrees to cooperate fully with Landlord and provide such documents, affidavits, information and actions as may be requested by Landlord (1) to comply with any Environmental Law or Legal Requirement, (2) to comply with any request of any mortgagee or tenant, and/or (3) for any other reason deemed necessary by Landlord in its sole discretion. In the event of any such occurrence that is required to be reported to a governmental authority under any Environmental Law or Legal Requirement, Tenant shall simultaneously deliver to Landlord copies of any notices given or received by Tenant and

shall promptly pay when due any fine or assessment against Landlord, Tenant, or the Premises or Property relating to such occurrence.

The provisions of this Section shall survive the expiration or earlier termination of this Lease.

9.05 SIGNS AND AUCTIONS. Except as provided in this Section, no sign, antenna or other structure or thing, shall be erected or placed on the Premises or any part of the exterior of the Building or erected so as to be visible from the exterior of the Building, without first securing the written consent of the Landlord. Landlord, at Landlord's cost, shall provide building standard lobby and floor signage identifying Tenant and, at Tenant's request, any subtenants permitted pursuant to Section 13, provided that Tenant reimburses Landlord upon demand for Landlord's cost to modify such lobby and floor signage. Any signage requested by Tenant at Tenant's entry shall be the responsibility of Tenant and subject to Landlord's prior written approval. Tenant shall not conduct or permit any auctions or sheriff's sales at the Property.

Notwithstanding the foregoing to the contrary, so long as Tenant occupies and conducts its business in at least 75 percent of the Premises, Tenant, at its sole cost and expense (including without limitation all costs in obtaining any and all required permits and governmental approvals) may install such other signage identifying Tenant on the exterior of the Building as may be allowed pursuant to Legal Requirements, provided that (i) Tenant obtains Landlord's prior written consent (which shall not be unreasonably withheld, conditioned or delayed) to the location and design of such signs and (ii) the square footage of any such signs, in the aggregate, does not exceed Tenant's Pro Rata Share of the aggregate square footage available to all tenants for such signs pursuant to Legal Requirements minus any square footage reserved by Landlord for multi-tenant signs. Tenant's rights under the preceding sentence are non-transferable. Any transfer of Tenant's signage rights shall automatically render such signage rights immediately null and void. Tenant shall repair and maintain any signs installed by it pursuant to the preceding sentence at its sole cost and expense and shall install such signs in compliance with the provisions of Section 10.05 of this Lease.

9.06 LANDLORD'S ACCESS. Landlord or its agents may enter the Premises at all reasonable times to show the Premises to potential buyers, lenders, or investors and, within the last 18 months of the Term or any extended term, to prospective tenants; to inspect and conduct tests in order to monitor Tenant's compliance with Legal Requirements governing Environmental Substances; for purposes described in Sections 2.01, 9.04 and/or 10.04(b) or for any other purpose Landlord reasonably deems necessary. Landlord shall give Tenant a minimum of 24 hours prior notice (which may be oral) of such entry and shall not enter Tenant's technical areas (if Tenant has previously notified Landlord in writing of the location and extent of such technical areas) unless accompanied by Tenant's representative (whom Tenant shall promptly provide). However, in case of emergency, Landlord may

enter any part of the Premises without prior notice or Tenant's representative and shall make reasonable efforts to notify Tenant.

ARTICLE 10: CONDITION AND MAINTENANCE OF PREMISES AND PROPERTY

10.01 EXISTING CONDITIONS. Except as expressly set forth herein with respect to the Tenant Related Work, Tenant shall accept the Premises and Property in their condition as of the Delivery Date to Tenant "as is" and subject to all recorded matters and Legal Requirements. Tenant acknowledges that except for any express representations in this Lease, neither Landlord nor any person acting under Landlord has made any representation as to the condition of the Property or the suitability of the Property for Tenant's intended use. Tenant represents and warrants that Tenant has made its own inspection and inquiry regarding the Property and is not relying on any representations of Landlord or any Broker or persons acting under either of them.

10.02 EXEMPTION AND LIMITATION OF LANDLORD'S LIABILITY.

10.02(a) EXEMPTION OF LANDLORD FROM LIABILITY. Tenant shall insure its personal property under an all risk full replacement cost property insurance policy. Landlord shall not be liable for any damage or injury to the person, property or business (including loss of revenue, profits or data) of Tenant, Tenant's employees, agents, contractors, or invitees, or any other person on or about the Property; provided, however, that this Section 10.02(a) shall not exempt Landlord from liability for Landlord's negligence or willful misconduct

solely to the extent that such liability cannot be waived by Landlord pursuant to applicable law. This exemption shall apply whether such damage or injury is caused by (among other things): (i) fire, steam, electricity, water, gas, sewage, sewer gas or odors, snow, ice, frost or rain; (ii) the breakage, leakage, obstruction or other defects of pipes, faucets, sprinklers, wires, appliances, plumbing, windows, air conditioning or lighting fixtures or any other cause; (iii) any other casualty or any Taking; (iv) theft; (v) conditions in or about Property or from other sources or places; or (vi) any act or omission of any other tenant.

10.02(b) LIMITATION ON LANDLORD'S LIABILITY. Tenant agrees that Landlord shall be liable only for breaches of its covenants occurring while it is owner of the Property (provided, however, that if Landlord from time to time is lessee of the ground or improvements constituting the Building, then Landlord's period of ownership of the Property shall be deemed to mean only that period while Landlord holds such leasehold interest). Upon any sale or transfer of the Building, the transferor Landlord (including any mortgagee) shall be freed of any liability or obligation thereafter arising and Tenant shall look solely to the transferee Landlord as aforesaid for satisfaction of such liability or obligation. Tenant and each person acting under Tenant agrees to look solely to Landlord's interest from time to time in the Property for satisfaction of any claim against Landlord. No owner, trustee, beneficiary, partner, member, manager, agent, or employee of Landlord

(or of any mortgagee or any lender or ground or improvements lessor) nor any person acting under any of them shall ever be personally or individually liable to Tenant or any person claiming under or through Tenant for or on account of any default by Landlord or failure by Landlord to perform any of its obligations hereunder, or for or on account of any amount or obligations that may be or become due under or in connection with this Lease or the Premises; nor shall it or they ever be answerable or liable in any equitable judicial proceeding or order beyond the extent of their interest in the Property. No deficit capital account of any member or partner of Landlord shall be deemed to be a liability of such member or partner or an asset of Landlord. Any lien obtained to enforce any judgment against Landlord shall be subject and subordinate to any mortgage encumbering the Property. In no event shall Landlord (or any such persons) ever be liable to Tenant for indirect or consequential damages.

10.03 LANDLORD'S OBLIGATIONS.

10.03(a) BASE BUILDING WORK. Landlord shall complete certain renovations to the Building in substantial accordance with the plans and specifications described in EXHIBIT I, with such changes as Landlord may determine in its discretion ("BASE BUILDING WORK"), provided such changes, if made following the approval of the Construction Documents for the Finish Work, do not have any material adverse affect on Tenant's ability to complete the Finish Work. The Base Building Work shall be done at Landlord's sole cost and expense. Tenant acknowledges that portions of the Base Building Work may be done before, simultaneously with, and/or after Finish Work, as hereinafter defined. The Base Building Work includes certain work necessary for the demising of the Premises as further described on EXHIBIT J, attached (the "TENANT RELATED WORK").

10.03(b) REPAIR AND MAINTENANCE. Subject to the provisions of Article 12, and except for damage caused by any act or omission of Tenant or persons acting under Tenant, Landlord shall keep the Building and the foundation, roof, Building systems (to the extent not serving the Premises exclusively), structural supports, exterior windows and exterior walls of the Building in good order, condition and repair, reasonable wear and tear excepted. Landlord shall not be obligated to maintain or repair any interior windows, doors, plate glass, the surfaces of walls or other fixtures, components or equipment within the Premises, but the same shall be Tenant's obligation. Tenant shall promptly report in writing to Landlord any defective condition known to it that Landlord is required to repair. Tenant waives the benefit of any present or future law that provides Tenant the right to repair the Premises or Property at Landlord's expense or to terminate this Lease because of the condition of the Property or Premises to the extent such benefit of law may be waived by Tenant.

10.04 TENANT'S OBLIGATIONS.

10.04(a) REPAIR AND MAINTENANCE. Except for work that Section 10.03 or Article 12 requires Landlord to do, Tenant at its sole cost and expense shall keep the Premises including without limitation all fixtures, systems and equipment now or hereafter on the Premises, or elsewhere exclusively serving the Premises, in good order, condition and repair (and at least as good order, condition and repair as they are in on the Commencement Date or may be put in

during the Term), reasonable wear and tear excepted; shall keep in a safe, secure and sanitary condition all trash and rubbish temporarily stored at the Premises; and shall make all repairs and replacements and to do all other work necessary for the foregoing purposes whether the same may be ordinary or extraordinary, foreseen or unforeseen. The foregoing shall include without limitation Tenant's obligation to maintain floors and floor coverings, to paint and repair walls and doors, to replace and repair all interior glass and windows, ceiling tiles, lights and light fixtures, pipes, drains and the like in the Premises. Without limitation, Tenant shall be responsible for heating, ventilating and air-conditioning systems and Utility Services serving the Premises from the point where such systems serve the Premises exclusively (including the Utility Switching Points to the Premises), and Tenant shall secure, pay for, and keep in force contracts with appropriate and reputable service companies reasonably approved by Landlord providing for the regular maintenance of such heating, ventilating and air-conditioning and Utility Services systems serving the Premises to the extent that such systems do not serve other tenants of the Property. If anything required pursuant to Section 10.04(a) to be repaired cannot be fully repaired or restored, Tenant shall replace it at Tenant's cost, even if the benefit or useful life of such replacement extends beyond the Term. Tenant shall hire its own cleaning contractor for the Premises.

10.04(b) LANDLORD'S RIGHT TO CURE. If Tenant does not perform any of its obligations under Section 10.04(a), Landlord upon ten (10) days' prior notice to Tenant (or without prior notice in the case of an emergency) may perform such maintenance, repair or replacement on Tenant's behalf, and Tenant shall reimburse Landlord for all costs reasonably incurred, together with an Administrative Charge, which payment shall be made, after written demand by Landlord, with the next payment of Rent hereunder.

10.04(c) FINISH WORK. Tenant shall perform all work, other than Base Building Work, required to prepare the Premises for Tenant's use and occupancy (the "FINISH WORK"). Any Finish Work constructed by Tenant shall be performed in accordance with, and subject to, the provisions of Section 10.05 and the Finish Work Letter attached as EXHIBIT L of the Lease. Tenant must expend at least $45.00 per square foot of the Premises for the Finish Work, which shall be of the type of work suitable for a first class office, laboratory, and research and development facility, and the Finish Work must be completed by Tenant on or before the date that is two (2) months after the Delivery Date.

10.05 TENANT WORK.

10.05(a) GENERAL. "TENANT WORK" shall mean all work, including Finish Work, demolition, improvements, additions and alterations, in or to the Premises but excluding Base Building Work. Without limitation, Tenant Work includes any penetrations in the walls, partitions, ceilings or floors and all attached carpeting, all signs visible from the exterior of the Premises, and any change in the exterior appearance of the windows in the Premises (including shades, curtains and the like). All Tenant Work shall be subject to Landlord's prior written approval and shall be arranged and paid for by Tenant all as provided herein; provided that any interior, non-structural Tenant Work (including any series of related Tenant Work projects) that (a) costs less than the Tenant Work Threshold Amount (which shall be $50,000), (b) does not interconnect with or materially affect any fire-safety, telecommunications, electrical, mechanical, ventilation or plumbing systems of the Building ("CORE BUILDING SYSTEMS"), and (c) does not affect any penetrations in or otherwise affect any walls, floors, roofs, or other structural elements of the Building or any signs visible from the exterior of the Premises or any change in the exterior appearance of the windows in the Premises (including shades, curtains and the like) shall not require Landlord's prior approval if Tenant delivers the Construction Documents (as defined in Section 10.05(b)) (or, if such work is of the type for which Construction Documents are not typically prepared in a first class office and laboratory building, such other description as is reasonably satisfactory to Landlord) for such work to Landlord at least five (5) business days' prior to commencing such work. Whether or not Landlord's approval is required, Tenant shall neither propose nor effect any Tenant Work that in Landlord's reasonable judgment (i) adversely affects any structural component of the Building, (ii) would be incompatible with the Core Building Systems, (iii) affects the exterior or the exterior appearance of the Building or common areas within or around the Building or other property than the Premises, (iv) diminishes the value of the Premises, or (v) requires any unusual expense to readapt the Premises. Prior to commencing any Tenant Work affecting air disbursement from ventilation systems serving Tenant or the Building, including without limitation the installation of Tenant's exhaust systems, Tenant shall provide Landlord with a third party report from a consultant, and in a form reasonably acceptable to Landlord, showing that such work will not adversely affect the ventilation systems or air quality of the Building (or of any other tenant in the Building) and shall, upon completion of such work, provide Landlord with a certification reasonably

satisfactory to Landlord from such consultant confirming that no such adverse effects have resulted from such work.

10.05(b) CONSTRUCTION DOCUMENTS. No Tenant Work shall be effected except in accordance with complete, coordinated construction drawings and specifications ("CONSTRUCTION DOCUMENTS") prepared in accordance with EXHIBIT G. Prior to the commencement of any Tenant Work requiring Landlord's approval hereunder, Tenant shall obtain Landlord's prior written approval of the Construction Documents for such work, which approval shall not be unreasonably withheld. The Construction Documents shall be prepared by an architect ("TENANT'S ARCHITECT") registered in the Commonwealth of Massachusetts and experienced in the construction of tenant space improvements in

comparable buildings in the area where the Premises are located and, if the value of such Tenant Work will equal or exceed the Tenant Work Threshold Amount or will affect any Core Building Systems or structural components of the Building, the identity of Tenant's Architect shall be approved by Landlord in advance, such approval not to be unreasonably withheld in the case of interior, non-structural alterations. Tenant shall be solely responsible for the liabilities associated with and expenses of all architectural and engineering services relating to Tenant Work and for the adequacy, accuracy, and completeness of the Construction Documents even if approved by the Landlord (and even if Tenant's Architect has been otherwise engaged by Landlord in connection with the Base Building Work). The Construction Documents shall set forth in detail the requirements for construction of the Tenant Work and shall show all work necessary to complete the Tenant Work including all cutting, fitting, and patching and all connections to the mechanical, electrical, and plumbing systems and components of the Building. Submission of the Construction Documents to Landlord for approval shall be accompanied by a certification of Tenant's Architect that all Tenant Work described in the Construction Documents (i) complies with all applicable laws, regulations, building codes, and first class design standards, (ii) does not adversely affect any structural component of the Building, (iii) is compatible with and does not adversely affect the Core Building Systems, (iv) does not affect any property other than the Premises, (v) conforms to floor loading limits specified by Landlord and its consultants, and (vi) and with respect to all materials, equipment and special designs, processes or products, does not infringe on any patent or other proprietary rights of others. The Construction Documents shall comply with Landlord's requirements for the uniform exterior appearance of the Building, including without limitation the use of Building standard window blinds and Building standard light fixtures within fifteen (15) feet of each exterior window. Landlord's approval of Construction Documents shall signify only Landlord's consent to the Tenant Work shown and shall not result in any responsibility of Landlord concerning compliance of the Tenant Work with laws, regulations, or codes, or coordination or compatibility with any component or system of the Property, or the feasibility of constructing the Tenant Work without damage or harm to the Building, all of which shall be the sole responsibility of Tenant.

10.05(c) PERFORMANCE. The identity of any person or entity (including any employee or agent of Tenant) performing or designing any Tenant Work ("TENANT CONTRACTOR") shall, if the cost of such work in any instance is in excess of the Tenant Work Threshold Amount or will affect any Core Building Systems or structural components of the Building or involves any work other than interior, nonstructural alterations, be approved in advance by Landlord. Landlord hereby approves Suffolk Construction Company as a potential Tenant Contractor for the Finish Work and, provided that Tenant can provide evidence satisfactory to the Landlord that The Richmond Group will not cause Tenant to breach the covenants set forth in this Lease regarding labor harmony, Landlord shall approve The Richmond Group as a potential Tenant Contractor for the Finish Work. Once any Tenant Contractor has been approved, then the same Tenant Contractor may thereafter be used by Tenant for the same type of work until Landlord notifies Tenant that such Tenant Contractor is no longer

approved. Tenant shall procure at Tenant's expense all necessary permits and licenses before undertaking any Tenant Work. Tenant shall perform all Tenant Work at Tenant's risk in compliance with all applicable laws and in a good and workmanlike manner employing new materials of good quality and producing a result at least equal in quality to the other parts of the Premises. When any Tenant Work is in progress, Tenant shall cause to be maintained insurance as described in the Tenant Work Insurance Schedule attached as EXHIBITS H AND H1 and such other insurance as may be reasonably required by Landlord covering any additional hazards due to such Tenant Work, and, if the cost of such Tenant Work exceeds the Tenant Work Threshold Amount also such bonds or other assurances of satisfactory completion and payment as Landlord may reasonably require, in each case for the benefit of Landlord. If the Tenant Work, other than the Finish

Work, in any instance requires Landlord's approval hereunder, Tenant shall reimburse Landlord for its reasonable costs of reviewing the proposed Tenant Work and inspecting installation of the same. At all times while performing Tenant Work, Tenant shall require any Tenant Contractor to comply with all applicable laws, regulations, permits and Landlord's rules and regulations relating to such work, including without limitation use of loading areas, elevators and lobbies. Each Tenant Contractor working on or requiring access to the roof of the Building shall coordinate their work with the Landlord and Landlord's roofing contractor, shall comply with its requirements, and shall not violate existing roof warranties.

Each Tenant Contractor shall work on the Property without causing labor disharmony with workers employed by Landlord in undertaking the Base Building Work, or other work at the Property undertaken by Landlord, from time to time (and Tenant shall be responsible for all costs required to produce labor harmony), coordination difficulties, or delay to or impairing of any guaranties, warranties or the work of any other contractor. Each Tenant Contractor shall, by entry into the Property, be deemed to have agreed to indemnify and hold the Indemnitees harmless from any claim, loss or expense arising in whole or in part out of any act or neglect committed by or under such person while on or about the Premises or Property to the same extent as Tenant has so agreed in this Lease, the indemnities of Tenant and Tenant Contractor being joint and several.

10.05(d) PAYMENT. Tenant shall pay the entire cost of all Tenant Work so that the Premises, including Tenant's leasehold, shall always be free of liens for labor or materials. If any such lien is filed that is claimed to be attributable to Tenant or persons acting under Tenant, then Tenant shall promptly (and always within thirty (30) days) discharge the same.

10.05(e) OTHER. Tenant must schedule and coordinate all aspects of work with the Property manager and Property engineer and shall make prior arrangements for elevator use with the Property manager. If an operating engineer is required by any union regulations, Tenant shall pay for such engineer. If shutdown of risers and mains for electrical, mechanical and plumbing work is required, such work shall be supervised by Landlord's representative at Tenant's cost. If special security arrangements must be made (e.g., in

connection with work outside normal business hours), Tenant Contractor shall pay the actual cost of such security. No work shall be performed in Property mechanical or electrical equipment rooms without Landlord's approval, which approval shall not be unreasonably withheld or delayed, and all such work shall be performed under Landlord's supervision. Except in case of emergency, at least forty-eight (48) hours' prior notice must be given to the Property management office prior to the shutdown of fire, sprinkler and other alarm systems, and in case of emergency, prompt notice shall be given. In the event that such work unintentionally alerts the Fire or Police Department or any private alarm monitoring company through an alarm signal, Tenant shall be liable for any fees or charges levied in connection with such alarm. Tenant shall pay to Landlord such charges as may from time to time be in effect with respect to any such shutdown. All demolition, installations, removals or other work that is reasonably likely to inconvenience other tenants of the Property or disturb Property operations must be scheduled with the Property manager at least twenty-four (24) hours in advance.

Installations within the Premises (and elsewhere where Tenant is permitted to make installations) shall not interfere with existing services and shall be installed so as not to unreasonably interfere with subsequent installation of ceilings or services for other tenants. Redundant electrical, control and alarm systems and mechanical equipment and sheet metal used or placed on the Property during construction and not maintained as part of Tenant's use of the Premises must be removed as part of the work.

Each Tenant Contractor shall take all reasonable steps to assure that any work is carried out without disruption from labor disputes arising from disputes concerning union jurisdiction and the affiliation of workers employed by said Tenant Contractor or its subcontractors and the union jurisdiction and affiliation of workers employed by Landlord to undertake the Base Building Work or other work at the Property undertaken by Landlord from time to time. Tenant shall be responsible for, and shall reimburse Landlord for, all actual costs and expenses, including reasonable attorneys' fees incurred by Landlord in connection with the breach by any Tenant Contractor of such obligations. If Tenant does not promptly resolve any labor dispute caused by or relating to any Tenant Contractor, Landlord may in its sole discretion request that Tenant remove such Tenant Contractor from the Property, and if such Tenant Contractor is not promptly removed, Landlord may prohibit such Tenant Contractor from entering the Property.

Upon completion of any Tenant Work, Tenant shall give to Landlord (i) a permanent certificate of occupancy (if one is legally required) and any other final governmental approvals required for such work, (ii) copies of "as built" plans and all construction contracts and (iii) proof of payment for all labor and materials.

10.06 CONDITION UPON TERMINATION. At the expiration or earlier termination of the Term, Tenant (and all persons claiming through Tenant) shall without the necessity of notice deliver the Premises (including all Finish Work and Tenant Work, and all

replacements thereof, except such additions, alterations, and other Tenant Work as the Landlord may direct to be removed at the time the Landlord approves the plans thereof, or, in the case of Tenant Work not subject to Landlord approval, at the time of expiration or earlier termination of the Term) broom-clean, in compliance with the requirements of Section 10.07 and in good and tenantable condition reasonable wear and damage by casualty or taking (to the extent provided in Article 12 only) excepted. The Premises shall be surrendered to Landlord free and clear of any mechanic's liens (or any similar lien related to labor or materials) filed against any part of the Premises and free and clear of any financing or other encumbrance on any equipment and/or Finish Work or Tenant Work to be surrendered with the Premises. As part of such delivery, Tenant shall also provide all keys (or lock combinations, codes or electronic passes) to the Premises to Landlord; remove all signs wherever located; and, except as provided in this Section 10.06, remove all Tenant Property and other personal property whether or not bolted or otherwise attached. As used herein, "TENANT PROPERTY" shall mean all trade fixtures, furnishings, equipment inventory, and other personal property owned by Tenant or any person acting under Tenant at the Premises (except to the extent such fixtures or equipment are paid for out of the Finish Work Allowance). Tenant shall repair all damage that results from such removal and restore the Premises substantially to a fully functional and tenantable condition (including the filling of all floor and wall holes, the removal of all disconnected wiring back to junction boxes and the replacement of all damaged ceiling tiles; but excluding (x) the filling of any floor and wall holes made in connection with tenant improvements that Tenant is permitted or required to leave in the Premises at the conclusion of the term and (y) the replacement of any Tenant Property that is being removed from the Premises). Any property not so removed shall be deemed abandoned, shall at once become the property of Landlord, and may be disposed of in such manner as Landlord shall see fit; and Tenant shall pay the cost of removal and disposal to Landlord upon demand. The covenants of this Section shall survive the expiration or earlier termination of the Term.

10.07 DECOMMISSIONING OF THE PREMISES. Prior to the expiration of this Lease (or within thirty (30) days after any earlier termination), Tenant shall clean and otherwise decommission all interior surfaces (including floors, walls, ceilings, and counters), piping, supply lines, waste lines and plumbing in and/or exclusively serving the Premises, and all exhaust or other ductwork in and/or exclusively serving the Premises, in each case which has carried or released or been exposed to any Environmental Substances, and shall otherwise clean the Premises so as to permit the report hereinafter called for by this Section 10.07 to be issued. Prior to the expiration of this Lease (or within thirty (30) days after any earlier termination), Tenant, at Tenant's expense, shall obtain for Landlord a report addressed to Landlord (and, at Tenant's election, Tenant) by a reputable licensed environmental engineer that is designated by Tenant and acceptable to Landlord in Landlord's reasonable discretion, which report shall be based on the environmental engineer's inspection of the Premises and shall show:

(i) that the Environmental Substances, to the extent, if any, existing prior to such decommissioning, have been removed as necessary so that the interior surfaces of the Premises (including floors, walls, ceilings, and counters), piping, supply lines, waste lines and plumbing, and all such exhaust or other ductwork in and/or exclusively serving the Premises, may be reused by a subsequent tenant or disposed of in compliance with applicable Environmental Laws (as defined in Section 9.04 hereof) without taking any special precautions for Environmental Substances, without incurring special costs or undertaking special procedures for demolition, disposal, investigation, assessment, cleaning or removal of Environmental Substances and without incurring regulatory compliance requirements or giving notice in connection with Environmental Substances; and

(ii) that the Premises may be reoccupied for office or laboratory use, demolished or renovated without taking any special precautions for Environmental Substances, without incurring special costs or undertaking special procedures

for disposal, investigation, assessment, cleaning or removal of Environmental Substances and without incurring regulatory requirements or giving notice in connection with Environmental Substances.

Further, for purposes of clause (ii): "SPECIAL COSTS" or "SPECIAL PROCEDURES" shall mean costs or procedures, as the case may be, that would not be incurred but for the nature of the Environmental Substances as Environmental Substances instead of non-hazardous materials. The report shall include reasonable detail concerning the clean-up location, the tests run and the analytic results.

If Tenant fails to perform its obligations under this Section, without limiting any other right or remedy, Landlord may, on five (5) business days' prior written notice to Tenant, perform such obligations at Tenant's expense, and Tenant shall promptly reimburse Landlord upon demand for all costs and expenses reasonably incurred together with an Administrative Charge. Tenant's obligations under this Section shall survive the expiration or earlier termination of this Lease.

ARTICLE 11: ROOFTOP LICENSE

11.01 ROOFTOP LICENSE. If requested by Tenant in writing and required to construct Tenant Work shown on any Construction Documents approved by Landlord, Landlord shall grant Tenant the appurtenant, exclusive, and irrevocable (except upon the expiration or earlier termination of this Lease) right at no additional charge, but otherwise subject to the terms and conditions of this Lease, to use a contiguous portion of the roof of the Building approved by Landlord (the "ROOFTOP INSTALLATION AREAS") to operate, maintain, repair and replace rooftop mechanical equipment appurtenant to the Permitted Uses installed as part of the Finish Work or otherwise as permitted pursuant to Section 10.05 ("TENANT'S EQUIPMENT"). The exact location and layout of the Rooftop Installation Areas shall be approved by Landlord in its sole

discretion and shall not exceed in area the Tenant's Pro Rata Share of rooftop areas made available to tenants in the Building for similar purposes.

11.02 INSTALLATION AND MAINTENANCE OF ROOFTOP EQUIPMENT. Tenant shall install Tenant's Equipment at its sole cost and expense, at such times and in such manner as Landlord may reasonably designate and in accordance with all of the applicable provisions of this Lease regarding Tenant Work. Tenant shall not install or operate Tenant's Equipment until it receives prior written approval of the Construction Documents in accordance with Section 10.05(b). Landlord may withhold approval if the installation or operation of Tenant's Equipment reasonably would be expected to damage the structural integrity of the Building.

Tenant shall engage Landlord's roofer before beginning any rooftop installations or repairs of Tenant's Equipment, whether under this Article 11 or otherwise, and shall always comply with the roof warranty governing the protection of the roof and modifications to the roof. Tenant shall obtain a letter from Landlord's roofer following completion of such work stating that the roof warranty remains in effect. Tenant, at its sole cost and expense, shall inspect the Rooftop Installation Areas at least once a month and correct any loose bolts, fittings or other appurtenances and shall repair any damage to the roof caused by the installation or operation of Tenant's Equipment. Tenant covenants that the installation, existence, maintenance and operation of Tenant's Equipment shall not violate any Legal Requirements or constitute a nuisance. Tenant shall pay Landlord following a written request therefor, with the next payment of Rent, (i) all applicable taxes or governmental charges, fees, or impositions imposed on Landlord because of Tenant's use of the Rooftop Installation Areas and (ii) the amount of any increase in Landlord's insurance premiums as a result of the installation of Tenant's Equipment.

11.03 INDEMNIFICATION. Tenant agrees that the installation, operation and removal of Tenant's Equipment shall be at its sole risk. Tenant shall indemnify and defend Landlord and the other Indemnitees against any liability, claim or cost, including reasonable attorneys' fees, incurred in connection with the loss of life, personal injury, damage to property or business or any other loss or injury (except to the extent due to the negligence or willful misconduct of Landlord or its employees, agents, contractors or invitees) arising out of the installation, use, operation, or removal of Tenant's Equipment by Tenant or its employees, agents, contractors, or invitees, including any liability arising out of Tenant's violation of this Article 11. Landlord assumes no responsibility for interference in the operation of Tenant's Equipment caused by other tenants' equipment, or for interference in the operation of other tenants' equipment caused by Tenant's Equipment. The provisions of this Section 11.03 shall survive the expiration or earlier termination of this Lease.

11.04 REMOVAL OF TENANT'S EQUIPMENT. Upon the expiration or earlier termination

of the Lease, Tenant, at its sole cost and expense, shall (i) remove Tenant's Equipment from the Rooftop Installation Areas, if necessary, in accordance with the provisions of this Lease regarding Tenant Work and (ii) leave the Rooftop Installation Areas in good order and repair,

reasonable wear and tear excepted. If Tenant does not remove Tenant's Equipment when so required, Landlord may remove and dispose of it and charge Tenant for all costs and expenses incurred. Notwithstanding clause (i) to the contrary, Tenant may request, at the time it seeks approval from Landlord for the installation of any Tenant's Equipment, that Landlord identify which, if any, of such Tenant's Equipment must be removed at the expiration or earlier termination of the Lease.

11.05 INTERFERENCE BY TENANT'S EQUIPMENT. Landlord may grant future roof rights to other parties, and Landlord shall be contractually obligated to cause such other parties to minimize interference with Tenant's Equipment. If Tenant's Equipment (i) causes physical damage to the structural integrity of the Building, (ii) materially interferes with any telecommunications, mechanical or other systems located at or servicing (as of the Lease Commencement Date) the Building or any building, premises or location in the vicinity of the Building, (iii) interferes with any other service provided to other tenants in the Building by rooftop installations installed prior to the installation of Tenant's Equipment or (iv) interferes with any other tenants' business, in each case in excess of that permissible under F.C.C. or other regulations (to the extent that such regulations apply and do not require such tenants or those providing such services to correct such interference or damage), Tenant shall within two (2) Business Days of notice (which may be oral) of a claim of interference or damage cooperate with Landlord or any other tenant or third party making such claim to determine the source of the damage or interference and effect a prompt solution at Tenant's expense (if Tenant's Equipment caused such interference or damage). In the event Tenant disputes Landlord's allegation that Tenant's Equipment is causing a problem with the Building (including, but not limited to, the electrical, HVAC, and mechanical systems of the Building) and/or any other Building tenants' equipment in the Building, in writing delivered within two (2) Business Days of receiving Landlord's notice claiming such interference, then Landlord and Tenant shall meet to discuss a solution, and if within seven (7) days of their initial meeting Landlord and Tenant are unable to resolve the dispute, then the matter shall be submitted to arbitration in accordance with the provisions set forth below.

The parties shall direct the Boston office of the American Arbitration Association (the "AAA") to appoint an arbitrator who shall have a minimum of ten (10) years' experience in commercial real estate disputes and who shall not be affiliated with either Landlord or Tenant. Both Landlord and Tenant shall have the opportunity to present evidence and outside consultants to the arbitrator.

The arbitration shall be conducted in accordance with the commercial real estate arbitration rules of the AAA insofar as such rules are not inconsistent with the provisions of this Lease (in which case the provisions of this Lease shall govern). The cost of the arbitration (exclusive of each party's witness and attorneys' fees, which shall be paid by such party) shall be borne equally by the parties.

Within ten (10) days of appointment, the arbitrator shall determine whether or not Tenant's Equipment is causing a problem with the Building and/or any other Building tenants' equipment in the Building, and the appropriate resolution, if any. The arbitrator's decision shall be final and binding on the parties. If Tenant shall fail to cooperate with Landlord in resolving any such interference or if Tenant shall fail to implement the arbitrator's decision within ten (10) days after it is issued, Landlord may at any time thereafter (i) declare an Event of Default and pursue the remedies set forth in Section 14 of this Lease and/or (ii) relocate the item(s) of Tenant's Equipment in dispute in a manner consistent with the arbitral decision.

11.06 RELOCATION OF TENANT'S EQUIPMENT. Based on Landlord's good faith determination that such a relocation is necessary, Landlord reserves the right to cause Tenant to relocate Tenant's Equipment located on the roof to comparably functional space on the roof by giving Tenant prior notice of such intention to relocate. If within thirty (30) days after receipt of such notice Tenant has not agreed with Landlord on the space to which Tenant's Equipment is to be relocated, the timing of such relocation, and the terms of such relocation, then Landlord shall have the right to make all such determinations in its reasonable judgment. Landlord agrees to pay the reasonable cost of moving Tenant's Equipment to such other space, taking such other steps necessary to ensure comparable functionality of Tenant's Equipment, and finishing such space to a

condition comparable to the then condition of the current location of Tenant's Equipment. Such payment by Landlord shall not constitute an Operating Expense under this Lease. Tenant shall arrange for the relocation of Tenant's Equipment within sixty (60) days after a comparable space is agreed upon or selected by Landlord, as the case may be. In the event Tenant fails to arrange for said relocation within the sixty-(60)-day period, Landlord shall have the right to arrange for the relocation of Tenant's Equipment at Landlord's expense, all of which shall be performed in a manner designed to minimize interference with Tenant's business.

ARTICLE 12: DAMAGE OR DESTRUCTION; CONDEMNATION

12.01 DAMAGE OR DESTRUCTION OF PREMISES. If the Premises or any part thereof shall be damaged by fire or other insured casualty, then, subject to the last paragraph of this Section, Landlord shall proceed with diligence, subject to then applicable statutes, building codes, zoning ordinances and regulations of any governmental authority, and at the expense of Landlord (but only to the extent of insurance proceeds made available to Landlord by any mortgagee of the Building and any ground lessor) to repair or cause to be repaired such damage, (other than any Tenant Work, which Tenant shall promptly commence, and proceed with diligence, to restore). All repairs to and replacements of Tenant Property and any Tenant Work shall be made by and at the expense of Tenant. The cost of any repairs performed under this Section by Landlord at Tenant's expense (including costs of design fees, financing, and charges for administration, overhead and construction management services by Landlord and Landlord's contractor) shall constitute Additional Rent hereunder. If the Premises or any part thereof shall have been rendered unfit for use and

occupation hereunder by reason of such damage, the Base Rent or a just and proportionate part thereof, according to the nature and extent to which the Premises shall have been so rendered unfit, shall be abated until the Premises (except as to Tenant Property and any Tenant Work) shall have been restored as nearly as practicable to the condition in which they were immediately prior to such fire or other casualty; provided, however, that in no event shall the period of such abatement exceed 14 months, and that if and to the extent Landlord shall be unable to collect the insurance proceeds (including rent insurance proceeds) applicable to such damage because of some action or inaction on the part of Tenant, or the employees, licensees or invitees of Tenant, the cost of repairing such damage shall be paid by Tenant and there shall be no abatement of rent. Landlord shall not be liable for delays in the making of any such repairs that are due to government regulation, casualties, and strikes, unavailability of labor and materials, delays in obtaining insurance proceeds, and other causes beyond the reasonable control of Landlord, nor shall Landlord be liable for any inconvenience or annoyance to Tenant or injury to the business of Tenant resulting from delays in repairing such damage.

If (i) the Premises are so damaged by fire or other casualty (whether or not insured) at any time during the last thirty (30) months of the Term that the cost to repair such damage is reasonably estimated to exceed one-third of the total Base Rent payable hereunder for the period from the estimated completion date of repair until the end of the Term, (ii) at any time the Property (or any portion thereof, whether or not including any portion of the Premises) is so damaged by fire or other casualty (whether or not insured) that substantial alteration or reconstruction or demolition of the Property (or a portion thereof) shall in Landlord's judgment be required, or (iii) at any time damage to the Building occurs by fire or other insured casualty and any mortgagee or ground lessor shall refuse to permit insurance proceeds to be utilized for the repair or replacement of such property and Landlord determines not to repair such damage, then and in any of such events, this Lease and the term hereof may be terminated at the election of Landlord by a notice from Landlord to Tenant within six (6) months, or such longer period as is required to complete arrangements with any mortgagee or ground lessor regarding such situation, following such fire or other casualty; the effective termination date pursuant to such notice shall be not less than thirty (30) days after the day on which such termination notice is received by Tenant. If any mortgagee refuses without fault by Tenant to permit insurance proceeds to be applied to replacement of the Premises, and neither Landlord nor such mortgagee has commenced such replacement within one hundred forty (140) days following adjustment of such casualty loss with the insurer, then Tenant may, until any such replacement commences, terminate this Lease by giving at least thirty (30) days prior written notice thereof to Landlord and such termination shall be effective on the date specified if such replacement has not then commenced. If Landlord has not completed any restoration of the Premises that it is required to complete pursuant to this Section 12.01 within fourteen (14) months following adjustment of such casualty loss with the insurer, then Tenant may terminate this Lease by thirty (30) days prior written notice to Landlord, provided that such notice shall be null and void, and this Lease shall remain in full force

and effect, if such restoration is completed within such 30 day period. In the event of any termination, the Term shall expire as though such effective termination date were the date originally stipulated in Article 1 for the end of the Term and the Base Rent and Additional Rent for Total Operating Costs (to the extent not abated as set forth above) shall be apportioned as of such date.

12.02 EMINENT DOMAIN. In the event that all or any substantial part of the Premises or the Property or its common areas is taken (other than for temporary use, hereafter described) by public authority under power of eminent domain (or by conveyance in lieu thereof), then by notice given within three months following the recording of such taking (or conveyance) in the appropriate registry of deeds, this Lease may be terminated at Landlord's election thirty (30) days after such notice, and Base Rent and Tenant's share of Total Operating Costs, shall be apportioned as of the date of termination. If this Lease is not terminated as aforesaid, subject to the rights of mortgagees Landlord shall within a reasonable time thereafter, diligently restore what may remain of the Premises (excluding any Tenant Property or other items installed or paid for by Tenant that Tenant is permitted or may be required to remove upon expiration and any Tenant Work) to a tenantable condition. In the event some portion of rentable floor area of the Premises is taken (other than for temporary use) and this Lease is not terminated, Base Rent shall be proportionally abated for the remainder of the Term. In the event of any taking of the Premises or any part thereof for temporary use, (i) this Lease shall be and remain unaffected thereby and rent shall not abate, and (ii) Tenant shall be entitled to receive for itself such portion or portions of any award made for such use with respect to the period of the taking that is within the Term, provided that if such taking shall remain in force at the expiration or earlier termination of this Lease, then Tenant shall pay to Landlord a sum equal to the reasonable cost of performing Tenant's obligations hereunder with respect to surrender of the Premises and upon such payment shall be excused from such obligations.

So long as Tenant is not then in breach of any covenant or condition of this Lease, any specific damages that are expressly awarded to Tenant on account of its relocation expenses, and specifically so designated, shall belong to Tenant. Except as provided in the preceding sentence of this paragraph, Landlord reserves to itself, and Tenant releases and assigns to Landlord, all rights to damages accruing on account of any taking or by reason of any act of any public authority for which damages are payable. Tenant agrees to execute such further instruments of assignment as may be reasonably requested by Landlord, and to turn over to Landlord any damages that may be recovered in any proceeding or otherwise; and Tenant irrevocably appoints Landlord as its attorney-in-fact with full power of substitution so to execute and deliver in Tenant's name, place and stead all such further instruments if Tenant shall fail to do so after ten (10) days' notice.

ARTICLE 13: ASSIGNMENT AND SUBLETTING

13.01 LANDLORD'S CONSENT REQUIRED. Except as set forth in this Article, Tenant shall not directly or indirectly assign this Lease, or sublet or license the Premises or any portion thereof, or advertise the Premises for assignment or subletting or permit the occupancy of all or any portion of the Premises by any person other than Tenant (each of the foregoing actions are collectively referred to as a "TRANSFER") without obtaining, on each occasion, the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed, provided that Tenant complies with the provisions of this Article. It shall be reasonable for Landlord to withhold consent if a proposed assignee or a subtenant (or subtenants) that in the aggregate would sublease greater than fifty percent (50%) of the Premises, does not or do not have a creditworthiness that is acceptable to Landlord in light of the obligations being assumed by the Transferee. A Transfer shall include, without limitation, any transfer of Tenant's interest in this Lease by operation of law, merger or consolidation of Tenant into any other firm or corporation, and the transfer or sale of a controlling interest in Tenant, whether by sale of its capital stock or otherwise or any sale of all or a substantial part of Tenant's assets. Any Transfer shall be subject to this Lease, all of the provisions of which shall be conditions to such Transfer and be binding on any assignee, subtenant, or other occupant (any of the foregoing, a "Transferee"). No Transferee shall have any right further to transfer its interest in the Premises except back to Tenant, and nothing herein shall impose any obligation on Landlord to consider any request for a further Transfer. In no event shall Tenant propose, or enter into, a Transfer (other than a Related Party Transfer, as defined below) during the first 24 months of the Term.

13.02 TERMS. Tenant shall not offer to make a Transfer (i) to any tenant in the Property or any prospective tenant with whom Landlord has commenced negotiations

for space (or any affiliate of such tenant or prospective tenant) in the Building, (ii) to any person or entity that would be of such type, character or condition as to be inappropriate as a tenant of a building comparable to the Building, or (iii) until such time as one hundred percent (100%) of the Building is leased for a term of years, unless the aggregate rent payable to Tenant under such Transfer equals or exceeds the prevailing market rate rent and other charges quoted by Landlord for space in the Building comparable to the Premises.

13.03 RIGHT OF TERMINATION OR RECAPTURE. If Tenant proposes a Transfer of all or more than fifty percent (50%) of the Premises in the aggregate (excluding any Related Party Transfer), in Tenant's request for consent under Section 13.04 Tenant shall offer to Landlord in writing the right to terminate this Lease as to the area in question. If Landlord shall elect in writing to accept the offer to terminate within thirty (30) days after receipt of such offer, this Lease shall so terminate as to the area in question of the date specified in such offer as of the date specified in the offer and the provisions of this Lease governing termination shall apply to such space. If Landlord shall not so elect, Tenant shall then comply with the provisions of this Article applicable to a Transfer. Landlord shall have the right to separate any portion of the Premises recaptured pursuant to this Section 13.03 from the remainder of the Premises by constructing demising walls at its sole cost and expense.

13.04 PROCEDURES. Tenant's request for consent under this Article shall set forth the details of the proposed Transfer, including: (i) the name, business, and financial condition of the prospective transferee, (ii) a true and complete copy of the proposed instrument containing all of the terms and conditions of such Transfer, (iii) a written agreement of the assignee, subtenant or licensee agreeing with Landlord to perform and observe all of the terms, covenants, and conditions of this Lease undertaken by such transferee and such other matters as are contained in Landlord's standard form of consent to a Transfer, which shall be substantially the same as the form attached hereto as Exhibit P with respect to subleases, and (iv) any other information Landlord reasonably deems relevant in light of the provisions of this Article 13. Subject to the foregoing provisions of this Article VI, Landlord's consent to a proposed sublease of all or part of the Premises shall not be unreasonably withheld. Tenant shall pay to Landlord, as Additional Rent, Landlord's reasonable attorneys' fees in reviewing any proposed Transfer, whether or not Landlord consents and whether or not Landlord's consent is required. Notwithstanding anything to the contrary in this Article 13, Tenant may make a Related Party Transfer without the consent of Landlord provided that Tenant gives Landlord at least ten (10) days' prior notice thereof together with evidence reasonably satisfactory to Landlord that the proposed Transfer is a Related Party Transfer and such Related Party Transfer is subject to all of the other terms and conditions of this Article. A "RELATED PARTY TRANSFER" shall mean one or more of the following: (1) a sublease to any subsidiary in which Tenant owns substantially all voting stock and control or to any parent owning substantially all voting stock and control of Tenant, (2) any assignment incident to the sale of substantially all of Tenant's assets, or (3) a statutory merger of Tenant with any other entity, provided that in either case of clause (2) or (3) the person succeeding to Tenant's interest immediately thereafter has a net worth equal to or in excess of that of Tenant at the Date of Lease or immediately prior to the Related Party Transfer, whichever is greater.

13.05 EXCESS RENTS. If the consideration, rent, or other amounts payable to Tenant under any other Transfer including Transfers consented to by Landlord (but excluding any Related Party Transfer) exceed the Rent and other charges to be paid hereunder and Tenant's Transfer Expenses (pro rated based (a) on floor area in the case of a subletting, license or other occupancy of less than the entire area of the Premises and (b) over the remaining Term), then Tenant shall pay to Landlord, as Additional Rent, fifty percent (50%) of the amount of such excess when and as received. Tenant's "TRANSFER EXPENSES" shall mean Tenant's reasonable and necessary payments to third parties in connection with such a Transfer on account of brokerage, legal and fit-up costs. Without limiting the generality of the first sentence of this section, any lump-sum payment or series of payments (including for the purchase or use of so-called leasehold improvements to the extent such leasehold improvements will become the property of Landlord upon the termination or earlier expiration of this Lease) on account of any Transfer shall be deemed to be in excess of rent and other charges in its or their entirety and profit on account of such lump sum payments shall mean the extent to which such lump sum payments exceed the sum of (x)

the present value of the Rent and other charges to be paid hereunder discounted at the rate of four percent (4%) and (y) Tenant's Transfer Expenses (pro rated based (a) on floor area in the case of a subletting, license or other occupancy of less than the entire area of the Premises and (b) over the remaining Term).

13.06 NO RELEASE Notwithstanding any Transfer and whether or not the same is consented to, the liability of Tenant to Landlord shall remain direct and primary. Any transferee of all or substantially all of Tenant's interest in the Premises shall be jointly and severally liable with Tenant to Landlord for the performance of all of Tenant's covenants under this Lease; and such assignee shall upon request execute and deliver such instruments as Landlord reasonably requests in confirmation thereof (and agrees that its failure to do so shall be a default). Tenant hereby irrevocably authorizes Landlord to collect Rent and other charges from any Transferee (and upon notice any Transferee shall pay directly to Landlord) and apply the net amount collected to the rent and other charges reserved under this Lease. No Transfer shall be deemed a waiver of the provisions of this Section, or the acceptance of the Transferee as a tenant, or a release of Tenant from direct and primary liability for the performance of all of the covenants of this Lease. The consent by Landlord to any Transfer shall not relieve Tenant or any transferee from the obligation of obtaining the express consent of Landlord to any modification of such Transfer or a further Transfer by Tenant or such transferee. Notwithstanding anything to the contrary in the documents effecting the Transfer, Landlord's consent shall not alter in any manner whatsoever the terms of this Lease, to which any Transfer at all times shall be subject and subordinate; provided that (other than in the case of a Related Party Transfer or as otherwise expressly provided herein) any option or other right that Tenant may have relating to the Premises, including any right to extend the Term or lease other premises, shall automatically be terminated. The breach by Tenant or any transferee of any covenant in this Article shall be a default for which there is no cure period. Landlord shall not have any liability to Tenant for any failure or refusal by Landlord to consent to a proposed Transfer, and Tenant's sole remedy for any such failure or refusal shall be for injunctive relief after a judicial determination that Landlord has breached any obligation to grant such consent required to be given hereunder.

Anything contained in the foregoing provisions of this section to the contrary notwithstanding, neither Tenant nor any transferee nor any other person having an interest in the possession, use, occupancy or utilization of the Premises shall enter into any lease, sublease, assignment, license, concession or other agreement for use, occupancy or utilization of space in the Premises that provides for rental or other payment for such use, occupancy or utilization based, in whole or in part, on the net income or profits derived by any person from the Premises leased, used, occupied or utilized (other than an amount based on a fixed percentage or percentages of receipts or sales), and any such purported lease, sublease, assignment, license, concession or other agreement shall be absolutely void and ineffective as a conveyance of any right or interest in the possession, use, occupancy or utilization of any part of the Premises.

13.07. TERMINATION UPON ASSIGNMENT Notwithstanding anything to the contrary in this Lease, Tenant shall have the one-time right to terminate the term of this Lease effective upon the date (the "DISSOLUTION TERMINATION DATE") that (x) the original Tenant named hereunder dissolves or otherwise ceases to exists as the result of a merger or (y) substantially all of Tenant's assets are acquired in a bona fide sale to an unrelated third party; provided, however, that (A) such termination shall only take effect if Tenant gives Landlord at lease nine months' prior written notice (a "MERGER/SALE TERMINATION NOTICE") of the Dissolution Termination Date and (B) in no event shall the Dissolution Termination Date occur on a date that is later than the last day of the fifth Lease Year of the term. The Termination Notice must be accompanied by a check payable to Landlord in an amount equal to the Termination Payment (calculated and subject to the minimum amount set forth in Section 3.04 as if the Dissolution Termination Date is the Early Termination Date) and (y) a warrant, effective upon the date of the Merger/Sale Termination Notice, to purchase 10,000 shares of Tenant's common stock at an exercise price of $2.70 per share in the form attached to the lease as EXHIBIT N. The Termination Payment shall be in addition to, and not in lieu of, Tenant's obligations to pay rent for the period ending on the Dissolution Termination Date. Time is of the essence with regard to the provisions of this Section 13.07.

Tenant's Dissolution Termination Notice shall be effective only if such notice is applicable to the entire Premises, is unconditional, and is accompanied by the Termination Payment. Once given, such termination notice shall be irrevocable. Notwithstanding the foregoing, any exercise by Tenant of its termination right under this Paragraph shall, at Landlord's election, be void if Tenant is in default hereunder continuing beyond applicable notice or cure period or an event or condition exists which with notice and the passage of time would constitute such a default, provided that, in either case, any such default is with respect to a payment of Rent or is on account of a breach of the terms and conditions of Section 9.04 or Section 13.01 of this Lease unless Tenant cures such default within the applicable cure period, if any, under this Lease (or unless Tenant otherwise provides Landlord with sufficient assurances

that Tenant will complete such cure as determined in Landlord's sole discretion), either at the time Tenant elects to terminate the Lease or at the time the Lease would be terminated pursuant to Tenant's election to terminate. If Tenant exercises its termination right hereunder, (a) Tenant's extension option under Section 3.03. and rights pursuant to Article 18 shall be null and void, and (b) Tenant shall peaceably surrender the Premises to Landlord on or before the Dissolution Termination Date in accordance with the applicable provisions of the Lease.

ARTICLE 14: EVENTS OF DEFAULT AND REMEDIES

14.01 EVENTS OF DEFAULT. If Tenant fails to pay Rent when due and such default continues for five (5) business days after notice, or if more than two default notices are properly given in any twelve-month period; or if Tenant vacates substantially all of the Premises

with more than six months of the Term remaining; or if Tenant vacates substantially all of the Premises with six months or less of the Term remaining and Tenant is then, or is thereafter, in default pursuant to any other provision of this Lease following the giving of applicable notices, if any; or if Tenant (or any Transferee) dissolves or otherwise ceases to do business in the Commonwealth of Massachusetts; or if Tenant (or any Transferee) makes any transfer of the Premises in violation of this Lease; or if a petition is filed by Tenant (or any Transferee) for insolvency or for appointment of a receiver, trustee or assignee or for adjudication, reorganization or arrangement under any bankruptcy act, or if any similar petition is filed against Tenant (or any Transferee) and such petition filed against is not dismissed within thirty (30) days thereafter; or if any representation or warranty made by Tenant is untrue in any material respect; or if Tenant fails to perform any other covenant or condition hereunder and such default continues longer than any period expressly provided for the correction thereof (and if no period is expressly provided then for thirty (30) days after notice is given, provided, however, that such period shall be reasonably extended in the case of any such non-monetary default that cannot be cured within such period only if the matter complained of can be cured, Tenant begins promptly and thereafter diligently completes the cure, and Tenant gives Landlord notice of such intent to cure within ten (10) days after notice of such default), or if the stock warrant (the "WARRANT") in the form of EXHIBIT M (the "INITIAL WARRANT") issued by Tenant to Landlord shall cease to be in full force and effect, or if the issuer of the Initial Warrant shall be in default under the Warrant beyond the expiration of any applicable cure period, then, and in any such case, Landlord and its agents lawfully may, in addition to any remedies for any preceding breach, immediately or at any time thereafter without demand or notice and with or without process of law, enter upon any part of the Premises in the name of the whole or mail or deliver a notice of termination of the Term of this Lease addressed to Tenant at the Premises or any other address herein, and thereby terminate the Term and repossess the Premises as of Landlord's former estate. Any default beyond applicable notice and cure periods by Tenant is referred to herein as an "EVENT OF DEFAULT." At Landlord's election such notice of termination may be included in any notice of default. Upon such entry or mailing the Term shall terminate, all executory rights of Tenant and all obligations of Landlord will immediately cease, and Landlord may expel Tenant and all persons claiming under Tenant and remove their effects without any trespass and without prejudice to any remedies for arrears of Rent or prior breach; and Tenant waives all statutory and equitable rights to its leasehold (including rights in the nature of further cure or redemption, if any). If Landlord engages attorneys in connection with any failure to perform by Tenant hereunder, Tenant shall reimburse Landlord for the fees of such attorneys on demand as Additional Rent. Without implying that other provisions do not survive, the provisions of this Article shall survive the Term or earlier termination of this Lease.

Rent forgiveness, allowances for (and/or Landlord expenses in designing and constructing) leasehold improvements to ready the Premises for Tenant's occupancy and the like, if any, have been agreed to by Landlord as inducements for Tenant faithfully to perform all of its obligations. For all purposes, upon the occurrence of any default and the

lapse of the applicable cure period, if any, any such inducements shall be deemed void as of the date hereof as though such had never been included (except to the extent previously received by Tenant); e.g., Tenant shall have no further right to any then unused amounts of Finish Work Allowance or to any then unapplied free rent or Rent credit. The foregoing will occur automatically without any further notice by Landlord, whether or not the Term is then or thereafter terminated and whether or not Tenant thereafter corrects such default.

14.02 REMEDIES FOR DEFAULT.

14.02(a) RELETTING EXPENSES DAMAGES. If the Term of this Lease is terminated for default, and Landlord relets the Premises within ninety (90) days of lease termination, Landlord shall be entitled to deduct from any credit due Tenant under Section 14.02(b) all of Landlord's reasonable costs, including reasonable attorneys fees, related to Tenant's default and in collecting amounts due and all reasonable expenses in connection with releting, including tenant inducements to new tenants, brokerage commissions, fees for legal services, expenses of preparing the Premises for releting and the like together with an administrative charge of 5% of all the foregoing costs ("RELETTING EXPENSES"). If Landlord does not relet the Premises within ninety (90) days of lease termination, Tenant covenants, as an additional cumulative obligation after such ninety (90) day period, to pay Landlord's Releting Expenses as and when incurred, and upon demand. It is agreed that Landlord may (i) relet the Premises or part or parts thereof for a term or terms that may be equal to, less than or exceed the period that would otherwise have constituted the balance of the Term, and may grant such tenant inducements, including free rent, as Landlord in its sole discretion considers advisable, and (ii) make such alterations to the Premises as Landlord in its sole discretion considers advisable, and no failure to relet or to collect rent under any releting shall operate to reduce Tenant's liability. Any obligation to relet imposed by law will be subject to Landlord's reasonable objectives of developing its property in a harmonious manner with appropriate mixes of tenants, uses, floor areas, terms and the like.

14.02(b) TERMINATION DAMAGES. If the Term of this Lease is terminated for default, unless and until Landlord elects lump sum liquidated damages described in the next paragraph, Tenant covenants, as an additional, cumulative obligation after any such termination, to pay punctually to Landlord all the sums and perform all of its obligations in the same manner as if the Term had not been terminated. In calculating such amounts Tenant will be credited with the net proceeds of any rent then actually received by Landlord from a releting of the Premises after deducting all Releting Expenses (unless such sums have previously been paid pursuant to Section 14.02(a)), provided that Tenant shall never be entitled to receive any portion of the re-letting proceeds, even if the same exceed the Rent originally due hereunder.

14.02(c) LUMP SUM LIQUIDATED DAMAGES. If this Lease is terminated for default, Tenant covenants, as an additional, cumulative obligation after any such termination, to pay forthwith to Landlord at Landlord's election made by written notice at any time after

termination, as liquidated damages a single lump sum payment equal to THE SUM OF (i) all sums to be paid by Tenant and not then paid at the time of such election, PLUS EITHER, as Landlord elects, (ii) the excess of the present value of all of the Rent reserved for the residue of the Term (with Additional Rent deemed to increase 4% in each year on a compounding basis) over the present value of the aggregate fair market rent and Additional Rent payable (if less than the Rent payable hereunder) on account of the Premises during such period, which fair market rent shall be reduced by reasonable projections of vacancies and by Landlord's Reletting Expenses described above to the extent not theretofore paid to Landlord), or (iii) an amount equal to the sum of all of the Rent and other sums due under the Lease with respect to the twelve (12)-month period next following the date of termination. (The Federal Reserve discount rate (or equivalent) shall be used in calculating such present values under clause (ii), and in the event the parties are unable to agree on such fair market rent, the matter shall be submitted, upon the demand of either party, to the office of the American Arbitration Association (or successor) closest to the Property, with a request for arbitration in accordance with the rules of the Association by a single arbitrator who shall be a licensed real estate broker with at least 10 years experience in the leasing of 1,000,000 or more square feet of floor area of buildings similar in character and location to the Premises, whose decision shall be conclusive and binding on the parties.)

14.02(d) REMEDIES CUMULATIVE; JURY WAIVER; LATE PERFORMANCE. The remedies to which Landlord may resort under this Lease, and all other rights and remedies of Landlord are cumulative, and any two or more may be exercised at the same time. Nothing in this Lease shall limit the right of Landlord to prove and obtain in proceedings for bankruptcy or insolvency an amount equal to the maximum allowed by any statute or rule of law in effect at the time; and Tenant agrees that the fair value for occupancy of all or any part of the Premises at all times shall never be less than the Base Rent and all Additional Rent payable from time to time. Tenant shall also indemnify and hold Landlord harmless in the manner provided elsewhere herein if Landlord shall become or be made a party to any claim or action (a) instituted by Tenant against any third party, or by any third party against Tenant, or by or against any person claiming Tenant; (b) for foreclosure of any lien for labor or material furnished to or for Tenant or such

other person; (c) otherwise arising out of or resulting from any act or transaction of Tenant or such other person; or (d) necessary to protect Landlord's interest under this Lease in a bankruptcy proceeding, or other proceeding under Title 11 of the United States Code, as amended. LANDLORD AND TENANT WAIVE TRIAL BY JURY IN ANY ACTION TO WHICH THEY ARE PARTIES, and further agree that any action arising out of this Lease (except an action for possession by Landlord, which may be brought in whatever manner or place provided by law) shall be brought in the Trial Court, Superior Court Department, in the county where the Premises are located.

14.02(e) WAIVERS OF DEFAULT; ACCORD AND SATISFACTION. No consent by Landlord or Tenant to any act or omission that otherwise would be a default shall be construed to permit other similar acts or omissions. Neither party's failure to seek redress for violation

or to insist upon the strict performance of any covenant, nor the receipt by Landlord of Rent with knowledge of any breach of covenant, shall be deemed a consent to or waiver of such breach. No breach of covenant shall be implied to have been waived unless such is in writing, signed by the party benefiting from such covenant and delivered to the other party; and no acceptance by Landlord of a lesser sum than the Rent due shall be deemed to be other than on account of the earliest installment of such Rent. Nor shall any endorsement or statement on any check or in any letter accompanying any check or payment be deemed an accord and satisfaction; and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such installment or pursue any other right or remedy. The delivery of keys (or any similar act) to Landlord shall not operate as a Termination of the Term or an acceptance or surrender of the Premises. The acceptance by Landlord of any Rent following the giving of any default and/or termination notice shall not be deemed a waiver of such notice. Tenant shall not interpose any counterclaim or counterclaims in a summary proceeding or in any action based on non-payment of Rent.

14.02(f) LANDLORD'S CURING. If Tenant fails to perform any covenant within any applicable cure period, then Landlord at its option may (without waiving any right or remedy for Tenant's non-performance) at any time thereafter perform the covenant for the account of Tenant. Tenant shall upon demand reimburse Landlord's cost (including reasonable attorneys' fees) of so performing, together with an administrative charge equal to 4% of such cost ("ADMINISTRATIVE CHARGE") to be payable, after notice by Landlord, with the next installment of Rent. Notwithstanding any other provision concerning cure periods, Landlord may cure any non-performance for the account of Tenant after such notice to Tenant, if any, as is reasonable under the circumstances if curing prior to the expiration of the applicable cure period is reasonably necessary to prevent likely damage to the Premises or possible injury to persons, or to protect Landlord's interest in the Premises.

ARTICLE 15: SECURITY DEPOSIT.

15.01 SECURITY DEPOSIT. On the execution of this Lease, Tenant shall pay to Landlord as a security deposit for the performance of the obligations of Tenant hereunder any amount specified therefor in Article 1. Said security deposit may be mingled with other funds of Landlord and no fiduciary relationship shall be created with respect to such deposit. If Tenant shall fail to perform any of its obligations under this Lease, Landlord may, but shall not be obliged to, apply the security deposit to the extent necessary to cure the default, and Tenant shall be obliged to reinstate such security deposit to the original amount thereof upon demand. Within thirty (30) days after the expiration or sooner termination of the Term the security deposit, to the extent not applied, shall be returned to the Tenant with interest at a rate equal to the yield on 10-year U.S. Treasury notes with a maturity date nearest the expiration date of the Initial Term as reported in the Wall Street Journal or, if it ceases to be published, a national financial publication reasonably selected by Landlord.

In lieu of a cash security deposit pursuant to the immediately preceding paragraph, on

the execution on this Lease, Tenant may elect to deliver to Landlord as security for the performance of the obligations of Tenant hereunder a letter of credit in the initial amount specified therefor in Article 1 in accordance with the terms set forth in this Section (as renewed, replaced, and/or reduced pursuant to this Section, the "LETTER OF CREDIT"), such Letter of Credit to be in the form attached hereto as Exhibit C, or such other form as is reasonably approved by Landlord in accordance with the provisions of this paragraph. The Letter of Credit (i) shall be irrevocable and shall be issued by a commercial bank reasonably acceptable to Landlord that has an office in Boston or Cambridge,

Massachusetts, (ii) shall require only the presentation to the issuer of a certificate of the holder of the Letter of Credit stating that Landlord is entitled to draw upon the Letter of Credit pursuant to the terms of the Lease or that a petition has been filed by Tenant (or any Transferee) for insolvency or for appointment of a receiver, trustee or assignee or for adjudication, reorganization or arrangement under any bankruptcy act and such petition filed has not dismissed within thirty (30) days thereafter, (iii) shall be payable to Landlord and its successors in interest as the Landlord and shall be freely transferable without cost to any such successor or any lender holding a collateral assignment of Landlord's interest in the Lease, (iv) shall be for an initial term of not less than one year and contain a provision that such term shall be automatically renewed for successive one-year periods unless the issuer shall, at least forty-five (45) days prior to the scheduled expiration date, give Landlord notice of such nonrenewable, and (v) shall otherwise be in form and substance reasonably acceptable to Landlord. Notwithstanding the foregoing, the term of the Letter of Credit for the final period of the Term shall be for a term ending not earlier than the date sixty (60) days after the last day of the Term.

Landlord shall be entitled to draw upon the Letter of Credit for its full amount (i) if Tenant shall be in default under the Lease, after the expiration of any applicable notice or cure period (or if transmittal of a default notice is barred by applicable law), or (ii) if, not less than thirty (30) days before the scheduled expiration of the Letter of Credit, Tenant has not delivered to Landlord a new Letter of Credit in accordance with this Section (which failure shall be deemed a default without notice or cure period). Landlord may, but shall not be obligated to, apply the amount so drawn to the extent necessary to cure Tenant's default under the Lease. Any amount drawn in excess of the amount applied by Landlord to cure any such default shall be held by Landlord as a security deposit for the performance by Tenant of its obligations hereunder pursuant to the terms set forth in the first paragraph of this Section 15.01. After any such application by Landlord of the Letter of Credit, Tenant shall reinstate the Letter of Credit to the amount originally required to be maintained hereunder, upon demand. Within sixty (60) days after the expiration or sooner termination of the Term the Letter of Credit, to the extent not applied, shall be returned to the Tenant.

In the event of a sale of the Building or lease, conveyance or transfer of the Building, Landlord shall have the right to transfer the security to the transferee, and upon notice to Tenant of such transfer, Landlord shall thereupon be released by Tenant from all

liability for the return of such security; and subject to Section 10.02(b), Tenant agrees to look to the transferee solely for the return of said security. The provisions hereof shall apply to every transfer or assignment made of the security to such a transferee. Tenant further covenants that it will not assign or encumber or attempt to assign or encumber the Letter of Credit or the monies deposited herein as security, and that neither Landlord nor its successors or assigns shall be bound by any assignment, encumbrance, attempted assignment or attempted encumbrance.

ARTICLE 16: PROTECTION OF LENDERS/GROUND LANDLORD

16.01 SUBORDINATION AND SUPERIORITY OF LEASE. Tenant agrees that this Lease and the rights of Tenant hereunder will be subject and subordinate to any lien of the holder of any existing or future mortgage, and to the rights of any lessor under any ground or improvements lease of the Building (all mortgages and ground or improvements leases of any priority are collectively referred to in this Lease as "MORTGAGE," and the holder or lessor thereof from time to time as a "MORTGAGEE"), and to all advances and interest thereunder and all modifications, renewals, extensions and consolidations thereof. With respect to future liens of any mortgage hereafter granted, Landlord will request that the mortgagee execute and deliver to Tenant an agreement (in such form as such mortgagee may request) in which the mortgagee agrees that such mortgagee shall not disturb Tenant in its possession of the Premises upon Tenant's execution thereof and attornment to such mortgagee as Landlord and performance of its Lease covenants (which conditions Tenant agrees with all mortgagees to perform). Upon such attornment, this Lease shall continue in full force and effect as a direct lease between the mortgagee and Tenant upon all of the terms, conditions and covenants as are set forth in this Lease, except that the mortgagee shall not be (i) liable in any way to Tenant for any act or omission, neglect or default on the part of Landlord under this Lease, (ii) responsible for any monies owing by or on deposit with Landlord to the credit of Tenant, (iii) subject to any counterclaim or setoff which theretofore accrued to Tenant against Landlord, (iv) bound by any amendment or modification of this Lease subsequent to such mortgage, or by any previous prepayment of Rent for more than one (1) month, which was not approved in writing by the mortgagee, (v) liable beyond mortgagee's interest in the Property, (vi) responsible for the performance of any work to be done by the

Landlord under this Lease to render the Premises ready for occupancy by the Tenant, or (vii) required to remove any person occupying the Premises or any part thereof, except if such person claims under the mortgagee. Tenant agrees that any present or future mortgagee may at its option unilaterally elect to subordinate, in whole or in part and by instrument in form and substance satisfactory to such mortgagee alone, the lien of its mortgagee (or the priority of its ground lease) to some or all provisions of this Lease.

Tenant agrees that this Lease shall survive the merger of estates of ground (or improvements) lessor and lessee. Until a mortgagee (either superior or subordinate to this Lease) forecloses Landlord's equity of redemption (or terminates or succeeds to a new

lease in the case of a ground or improvements lease) no mortgagee shall be liable for failure to perform any of Landlord's obligations (and such mortgagee shall thereafter be liable only after it succeeds to and holds Landlord's interest and then only as limited herein). Tenant shall, if requested by Landlord or any mortgagee, give notice of any alleged non-performance on the part of Landlord to any such mortgagee provided that an address for such mortgagee has been designated to Tenant, in writing, and Tenant agrees that such mortgagee shall have a separate, consecutive reasonable cure period of no less than thirty (30) days (to be reasonably extended in the same manner Landlord's cure period is to be extended and for such additional periods as is necessary to allow such Mortgagee to take possession of the Property) following Landlord's cure period during which such mortgagee may, but need not, cure any non-performance by Landlord. The agreements in this Lease with respect to the rights and powers of a mortgagee constitute a continuing offer to any person that may be accepted by taking a mortgage (or entering into a ground or improvements lease) of the Premises. This Section shall be self-operative, but in confirmation thereof, Tenant shall execute and deliver the subordination agreement in such other form as such mortgagee may request.

16.02 RENT ASSIGNMENT. If from time to time Landlord assigns this Lease or the rents payable hereunder to any person, whether such assignment is conditional in nature or otherwise, such assignment shall not be deemed an assumption by the assignee of any obligations of Landlord; but, subject to the limitations herein including Sections 16.02 and 10.02(b), the assignee shall be responsible only for non-performance of Landlord's obligations that occur after it succeeds to, and only during the period it holds possession of, Landlord's interest in the Premises after foreclosure or voluntary deed in lieu of foreclosure.

16.03 OTHER INSTRUMENTS. The provisions of this Article shall be self-operative; nevertheless, Tenant agrees to execute, acknowledge and deliver any subordination, attornment or priority agreements or other instruments conforming to the provisions of this Lease (and being otherwise commercially reasonable) from time to time requested by Landlord or any mortgagee, and further agrees that its failure to do so within ten (10) days after written request shall be a default for which this Lease may be terminated without further notice. Without limitation, where Tenant in this Lease indemnifies or otherwise covenants for the benefit of mortgagees, such agreements are for the benefit of mortgagees as third party beneficiaries; and at the request of Landlord, Tenant from time to time will confirm such matters directly with such mortgagee.

16.04 ESTOPPEL CERTIFICATES. Within fifteen (15) days after Landlord's request, Tenant shall execute, acknowledge and deliver to Landlord a written statement certifying: (i) that none of the terms or provisions of this Lease have been changed (or if they have been changed, stating how); (ii) that this Lease has not been canceled or terminated; (iii) the last date of payment of Base Rent and other charges and the time period covered; (iv) that Landlord is not in default under this Lease (or if Tenant states that Landlord is in default,

describing it in reasonable detail); and (v) such other information with respect to Tenant or this Lease as Landlord may reasonably request or which any prospective purchaser or encumbrancer of the Property may require. Landlord may deliver any such statement by Tenant to any such prospective purchaser or encumbrancer, which may rely conclusively upon such statement as true and correct. If Tenant does not deliver such statement to Landlord within such fifteen-(15)-day period, Landlord, and any such prospective purchaser or encumbrancer, may conclusively presume and rely upon the following facts: (i) that the terms and provisions of this Lease have not been changed except as represented by Landlord; (ii) that this Lease has not been canceled or terminated except as otherwise represented by Landlord; (iii) that not more than one month's Base Rent or other charges have been paid in advance; and (iv) that Landlord is not in default under this Lease. In such event, Tenant shall be estopped from denying the truth of such facts.

16.05 FINANCIAL CONDITION. No more than once in any twelve (12) month period, Tenant, within fifteen (15) days after request from Landlord from time to time, shall deliver to Landlord Tenant's annual audited (or, if audited statements are not then available, statements certified in writing by Tenant's chief financial officer; provided that Tenant shall promptly provide Landlord with audited statements for such period when they become available) financial statements for the latest available two (2) fiscal years, including the year ending no more than six (6) months prior to Landlord's request, and quarterly financial statements certified in writing by Tenant's chief financial officer. Landlord may request such financial statements more frequently in connection with a specific sale or financing transaction. Landlord may deliver such financial statements to its mortgagees and lenders and prospective mortgagees, lenders and purchasers. Tenant represents and warrants to Landlord that each such financial statement shall be true and accurate as of its date. Except for publicly available information, financial statements shall be confidential and shall be used only for the purposes set forth in this Section.

ARTICLE 17: MISCELLANEOUS PROVISIONS

17.01 LANDLORD'S CONSENT FEES. In addition to fees and expenses in connection with Tenant Work, as described in Section 10.05, Tenant shall pay Landlord's reasonable fees and expenses, including legal, engineering and other consultants' fees and expenses, incurred in connection with Tenant's request for Landlord's consent under Article 13 (Assignment and Subletting) or in connection with any other act by Tenant that requires Landlord's consent or approval under this Lease.

17.02 NOTICE OF LANDLORD'S DEFAULT. Tenant shall give notice of Landlord's failure to perform any of its obligations under this Lease to Landlord, and to any mortgagee or beneficiary under any deed of trust encumbering the Property whose name and address have been given to Tenant. Landlord shall not be in default under this Lease unless Landlord (or such mortgagee or beneficiary) fails to cure such non-performance within thirty (30) days after receipt of Tenant's notice. However, if such non-performance

requires more than thirty (30) days to cure, Landlord shall not be in default if such cure is begun within such thirty (30) day period and diligently completed. In no event shall Landlord be liable for indirect or consequential damages (including loss of revenue, profits or data) arising out of any default by Landlord under this Lease.

17.03 QUIET ENJOYMENT. Landlord agrees that, so long as (i) Tenant is not in default under the terms of this Lease and (ii) this Lease is in full force and effect, Tenant shall lawfully and quietly hold, occupy and enjoy the Premises during the Term of this Lease without disturbance by Landlord or by any person claiming through or under Landlord, subject to the terms of this Lease.

17.04 INTERPRETATION. In any provision relating to the conduct, acts or omissions of Tenant, the term "TENANT" includes Tenant's agents, employees, contractors, invitees, successors or others using the Premises with Tenant's expressed or implied permission.

17.05 NOTICES. All notices, requests and other communications required under this Lease shall be in writing, addressed as specified in Article 1, and shall be (i) personally delivered, (ii) sent by certified mail, return receipt requested, postage prepaid, (iii) delivered by a national overnight delivery service that maintains delivery records or (iv) sent by telecopier or facsimile machine ("fax") that automatically generates a transmission report, with a copy also sent as described in clause (i), (ii) or (iii). All notices shall be effective upon delivery (or refusal to accept delivery); provided, however, that notice by fax or telecopy shall be effective when transmitted. Either party may change its notice address upon written notice to the other party.

17.06 NO RECORDATION. Tenant shall not record this Lease. Either Landlord or Tenant may require that a statutory notice, short form or memorandum of this Lease executed by both parties be recorded. Tenant may record any SNDA (notifying Landlord of the date and book and page number) or request Landlord to record it on Tenant's behalf. The party requesting or requiring such recording shall pay all expenses, transfer taxes and recording fees.

17.07 CORPORATE AUTHORITY. If Tenant is a business entity, then the person or persons executing this Lease on behalf of Tenant jointly and severally warrant and represent in their individual capacities that (a) Tenant is duly organized, validly existing and in good standing under the laws of the jurisdiction in which such entity was organized; (b) Tenant has the authority to own its property and to carry on its business as contemplated under this Lease; (c) Tenant is in compliance with all laws and orders of public authorities

applicable to Tenant; (d) Tenant has duly executed and delivered this Lease; (e) the execution, delivery and performance by Tenant of this Lease (i) are within the powers of Tenant, (ii) have been duly authorized by all requisite action, (iii) will not violate any provision of law or any order of any court or agency of government, or any agreement or other instrument to which Tenant is a party or by which it or any of its property is bound, and

(iv) will not result in the imposition of any lien or charge on any of Tenant Property, except by the provisions of this Lease; and (f) the Lease is a valid and binding obligation of Tenant in accordance with its terms. Tenant, if a business entity, agrees that breach of the foregoing warranty and representation shall at Landlord's election be a default under this Lease for which there shall be no cure. This warranty and representation shall survive the termination of the Term.

17.08 JOINT AND SEVERAL LIABILITY, COUNTERPARTS. If more than one party signs this Lease as Tenant, they shall be jointly and severally liable for all obligations of Tenant. This Lease may be executed in multiple counterparts, each of which shall be deemed an original and all of which together shall constitute a single agreement.

17.09 FORCE MAJEURE. If a party cannot perform any of its obligations due to events beyond its reasonable control (other than the inability to make payments when due), the time provided for performing such obligations shall be extended by a period of time equal to the duration of the events. Events beyond a party's reasonable control include acts of God, war, civil commotion, labor disputes, strikes, fire, flood or other casualty, shortages of or the inability to obtain labor or material from customary sources on customary terms, government regulation or restriction, weather conditions or acts, neglects or delays of the other party.

17.10 LIMITATION OF WARRANTIES. Landlord and Tenant expressly agree that there are and shall be no implied warranties of merchantability, habitability, suitability, fitness for a particular purpose or of any other kind arising out of this Lease, and there are no warranties which extend beyond those expressly set forth in this Lease.

17.11 NO OTHER BROKERS. Landlord and Tenant represent and warrant to each other that the brokers named in Article 1 are the only agents, Broker(s), finders or other parties with whom such party has dealt who may be entitled to any commission or fee with respect to this Lease or the Premises or the Property. Landlord and Tenant agree to indemnify and hold the other harmless from any claim, demand, cost or liability, including attorneys' fees and expenses, asserted by any party other than the brokers named in Article 1 based upon dealings of that party with the indemnifying party. The provisions of this Section shall survive the Term or early termination of this Lease.

17.12 APPLICABLE LAW AND CONSTRUCTION. This Lease may be executed in counterparts, shall be construed as a sealed instrument, and shall be governed exclusively by the provisions hereof and by the laws of the state where the Property is located without regard to principles of choice of law or conflicts of law. A facsimile signature to this Lease shall be sufficient to prove the execution by a party. The covenants of Landlord and Tenant are independent, and such covenants shall be construed as such in accordance with the laws of The Commonwealth of Massachusetts. If any provisions shall to any extent be invalid, the remainder shall not be affected. Other than contemporaneous instruments executed and

delivered of even date (i.e. the notice of lease, if any, pursuant to Section 17.06 and the Initial Warrant), this Lease contains all of the agreements between Landlord and Tenant relating in any way to the Premises and supersedes all prior agreements and dealings between them. There are no oral agreements between Landlord and Tenant relating to this Lease or the Premises. This Lease may be amended only by instrument in writing executed and delivered by both Landlord and Tenant. The provisions of this Lease shall bind Landlord and Tenant and their respective successors and assigns, and shall inure to the benefit of Landlord and its successors and assigns and of Tenant and its permitted successors and assigns, subject to Article 13. As used herein, "NON-MONETARY DEFAULT" shall mean a default that cannot be substantially cured by the payment of money. The titles are for convenience only and shall not be considered a part of the Lease. This Lease shall not be construed more strictly against one party than against the other merely by virtue of the fact that it may have been prepared primarily by counsel for one of the parties, it being recognized that both Landlord and Tenant have contributed substantially and materially to the preparation of this Lease. If Tenant is granted any extension or other option,

to be effective the exercise (and notice thereof) shall be unconditional; and if Tenant purports to condition the exercise of any option or to vary its terms in any manner, then the option granted shall be void and the purported exercise shall be ineffective. The enumeration of specific examples of a general provisions shall not be construed as a limitation of the general provision. Unless a party's approval or consent is required by the express terms of this Lease not to be unreasonably withheld, such approval or consent may be withheld in the party's sole discretion. The submission of a form of this Lease or any summary of its terms shall not constitute an offer by Landlord to Tenant; but a leasehold shall only be created and the parties bound when this Lease is executed and delivered by both Landlord and Tenant and approved by the holder of any mortgagee of the Premises having the right to approve this Lease. Nothing herein shall be construed as creating the relationship between Landlord and Tenant of principal and agent, or of partners or joint venturers or any relationship other than landlord and tenant. This Lease and all consents, notices, approvals and all other related documents may be reproduced by any party by any electronic means or by facsimile, photographic, microfilm, microfiche or other reproduction process and the originals may be destroyed; and each party agrees that any reproductions shall be as admissible in evidence in any judicial or administrative proceeding as the original itself (whether or not the original is in existence and whether or not reproduction was made in the regular course of business), and that any further reproduction of such reproduction shall likewise be admissible. If any payment in the nature of interest provided for in this Lease shall exceed the maximum interest permitted under controlling law, as established by final judgment of a court, then such interest shall instead be at the maximum permitted interest rate as established by such judgment. The term "TERM" includes the Initial Term as it may be extended pursuant to Section 3.03.

ARTICLE 18: EXPANSION RIGHTS

18.1 RIGHT OF FIRST OFFER. Reference is made to certain space outlined as the First Offer

Space on EXHIBIT N (the "First Offer Space"). Before entering into a lease for at least 5,000 rentable square feet of the First Offer Space with a third party for office, laboratory, and/or research and development uses (but excluding from Tenant's first offer right leases entered into during the initial lease-up of the First Offer Space, and renewals, extensions, and expansions of the same, and any lease for retail or other uses), Landlord shall notify Tenant of the terms on which Landlord intends to lease the space ("Landlord's Notice"). Within five business days after receipt of Landlord's Notice, Tenant may, by written notice delivered to Landlord, (i) reject Landlord's Notice, or (ii) reject Landlord's Notice but unconditionally and irrevocably offer to lease such space from Landlord for its own use on specific economic terms proposed in Tenant's response, or (iii) unconditionally and irrevocably offer to lease such space from Landlord for its own use on the terms set forth in Landlord's Notice (the failure by Tenant to timely respond as aforesaid being deemed Tenant's rejection of Landlord's Notice).

If Landlord's Notice is rejected under clause (i) above (or deemed rejected by Tenant's failure to timely respond), then Landlord may enter into any lease for such space, provided that Landlord shall deliver to Tenant a new Landlord's Notice prior to entering into an initial lease for the First Offer Space providing for an effective rent (after taking into account any free rent or other concessions) more than ten percent (10%) less than that specified in Landlord's Notice.

If Tenant timely offers to lease the space on alternative terms as set forth in clause (ii) above, then Landlord may, by written notice delivered within thirty days of receipt thereof, accept or decline such offer (the failure to so respond being deemed Landlord's election to decline Tenant's offer). If such offer under clause (ii) is declined (or deemed declined), then, for a period of one year after Landlord's receipt of Tenant's offer, Landlord may enter into any lease for such space at an effective rent (after taking into account any tenant improvement allowance) greater than that set forth in Tenant's offer. If, during such one-year period, Landlord desires to enter into a third-party lease at an effective rent less than or equal to the effective rent set forth in Tenant's offer, Landlord shall deliver to Tenant a new Landlord's Notice. If Landlord does not enter into any lease within such one-year period, Landlord shall re-commence the process under this Section before entering into a lease for the space.

If Tenant timely offers to lease the space as set forth in clause (iii) above, then Landlord shall, by written notice delivered within thirty days of receipt thereof, accept such offer (the failure to so respond being deemed Landlord's election to accept the proposed lease).

If Landlord timely accepts an offer by Tenant under this Section, the space shall, subject to the following paragraph below and without further action by the parties, be leased by Tenant on the accepted terms and otherwise on all of the terms of the Lease in effect immediately prior to such expansion, provided that, at the request of either party,

Landlord and Tenant shall promptly execute and deliver an agreement confirming such expansion of the Premises and the estimated date the Premises are to be expanded pursuant to this Paragraph with a provision for establishing the effective date of such expansion based on actual delivery. Landlord's failure to deliver, or delay in delivering, all or any part of the First Offer Space, for any reason, shall not give rise to any liability of Landlord, shall not alter Tenant's obligation to accept such space when delivered, shall not constitute a default of Landlord, and shall not affect the validity of the Lease.

Notwithstanding any provision of this Section to the contrary, Tenant's rights under this Section shall be void, at Landlord's election, if (i) Tenant is in default hereunder, after any applicable notice and cure periods have expired, at any time prior to the time Tenant makes any election with respect to the First Offer Space under this Section or at the time the First Offer Space would be added to the Premises, (ii) any sublease of greater than twenty five percent (25%) of the Premises in the aggregate exists at any such time which requires Landlord's consent under Article 13, or (iii) Tenant has exercised its termination rights pursuant to Section 3.04 and/or 13.07 of this Lease. Nothing in this Section shall be construed to grant to Tenant any rights or interest in any space in the Building, and any claims by Tenant alleging a failure of Landlord to comply herewith shall be limited to claims for monetary damages. Tenant may not assert any rights in any space nor file any lis pendens or similar notice with respect thereto.

[Remainder of Page Intentionally Left Blank, Signature Page Follows]

LANDLORD:

21 ERIE REALTY TRUST

By: /s/ David M. Roby

Name: DAVID M. ROBY
Title: Trustee

TENANT:

METABOLIX, INC.

By: /s/ James J. Barber

Name: JAMES J. BARBER
Title: President or Vice President

By: /s/ J. Barber

Name: J. BARBER
Title: Treasurer or Assistant Treasurer

EXHIBIT A

PROPERTY

PARCEL I

A certain parcel of land with the buildings thereon situated in Cambridge, Middlesex County, Massachusetts and being shown as Lot "A" on a Plan entitled "Subdivision of Land in Cambridge dated September 20, 1961, drawn by Edward Smith, Surveyor, 517 School Street, Belmont," recorded with Middlesex South District Registry of Deeds, Book 9910, Page 526, and bounded and described as follows:

NORTHEASTERLY by Merriam Street, Eighty-five and sixty-six one hundredths (85.66) feet;

SOUTHEASTERLY by Waverly Street, Two hundred (200.00) feet;

SOUTHWESTERLY by Erie Street, One hundred twenty-five (125.00) feet;

NORTHWESTERLY by land of owners unknown One hundred two and fourteen one hundredths (102.14) feet;

NORTHEASTERLY by Lot "B" as shown on said plan by line running through the center of a twelve (12) inch brick partition wall, Thirty-eight and thirteen one hundredths (38.13) feet; and

NORTHWESTERLY by Lot "B" by a line running through the center of a twelve (12) inch brick partition wall, Ninety-seven and eighty-six one hundredths (97.86) feet.

Containing Twenty-one thousand, two hundred and eight (21,208) square feet of land, be all or any of said measurements and contents, more or less, and subject to easements of record insofar as they may now be in force and applicable, and subject to the provisions of a Party Wall Agreement dated October 5, 1961, and recorded October 16, 1961, with Middlesex South District Registry of Deeds, Book 9910, Page 528.

PARCEL II

Beginning at a point in the southwesterly line of Merriam Street, said point being distant eighty-five and sixty-six one hundredths (85.66) feet from the intersection of the southwesterly line of Merriam Street and the northwesterly line of Waverly Street;

Thence running in a southwesterly direction partly through the center of a 12" brick

partition wall ninety-seven and eighty-six one hundredths (97.86) feet to a point;

Thence running in a northwesterly direction through the center of a 12" brick partition wall thirty-eight and thirteen one hundredths (38.13) feet to a point;

Thence running in a southwesterly direction two and fourteen one hundredths (2.14) feet to a point;

Thence running in a northwesterly direction fifteen and sixty-one hundredths (15.61) feet;

Thence turning and running in a northeasterly direction one hundred (100.00) feet to a point in the southwesterly line of Merriam Street;

Thence running in a southeasterly direction along with the southwesterly line of Merriam Street fifty-three and seventy-four one hundredths (53.74) feet to the point of beginning.

The above described parcel of land, containing five thousand two hundred and ninety-two (5,292) square feet, is shown as Lot "B" on a Plan entitled "Subdivision of Land in Cambridge dated September 20, 1961, drawn by Edward Smith Surveyor, 517 School St. Belmont," recorded with Middlesex South District Registry of Deeds, Cambridge, Massachusetts at Book 9910, Page 526.

Including, also, any interests in fee to any portion of Merriam Street, a private way, which runs with the aforedescribed parcels.

EXHIBIT B

PREMISES

EXHIBIT B
FIRST FLOOR
CROSS-MATCHED AREAS ARE
INCLUDED IN PREMISES

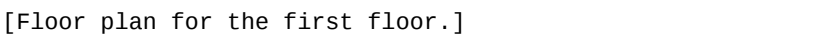
[Floor plan for the first floor.]

EXHIBIT B
SECOND FLOOR
CROSS-MATCHED AREAS ARE
EXCLUDED FROM PREMISES

[Floor plan for the second floor.]

EXHIBIT C

FORM OF LETTER OF CREDIT

FORM OF LETTER OF CREDIT

[Issuer]
[Street Address]
Date: , 2003

IRREVOCABLE STANDBY LETTER OF CREDIT NO.

Account Party:

In favor of Beneficiary:21 Erie Realty Trust, its successors and assigns
c/o Lyme Properties, LLC
101 Main Street, 18th Floor
Cambridge, MA 02142

AMOUNT EXPIRY DATE:
USD $ [Expiry Date]
[Dollar Amount]

Gentlemen:

We hereby open our irrevocable letter of credit in your favor for an amount of USD $(U.S. Dollars Only U.S. Dollars Only) available by your draft at sight drawn on the [Lending Institution Name, Lending Institution Address], bearing the clause "Drawn under [Issuer] Letter of Credit No. dated , 2003," and accompanied by the following document:

Beneficiary's signed statement stating that:

(A) "The undersigned Beneficiary is entitled to draw upon this Letter of Credit pursuant to the terms of that Lease dated [Lease Date] for premises at 21 Erie Street, Cambridge, Massachusetts between and 21 Erie Realty Trust for the amount drawn hereunder. 21 Erie Realty Trust hereby makes demand for the payment of $ of the Letter of Credit." Such statement shall be conclusive as to such matters.

OR

(B) "The undersigned Beneficiary is entitled to draw upon this Letter of Credit

because a petition has been filed with respect to the tenant under that certain Lease dated [Lease Date] for premises at 21 Erie Street, Cambridge, Massachusetts between and 21 Erie Realty Trust for (x) insolvency or for appointment of a receiver, trustee or assignee, or (y) for adjudication, reorganization or arrangement under any bankruptcy act, and such petition filed was not dismissed within thirty (30) days thereafter." Such statement shall be conclusive as to such matters.

Partial draws hereunder are permitted. This Letter of Credit is transferable without charge by Beneficiary. This Letter of Credit sets forth in full the terms of our undertaking and such undertaking shall not in any way be modified, amended, or amplified by reference to any document(s), instrument(s), contract(s), or agreement(s) referred to herein or in which this Letter of Credit relates, and any such reference shall not be deemed to incorporate herein by reference any document(s), instrument(s), contract(s), or agreement(s).

It is a condition of this Letter of Credit that it shall be deemed automatically extended without amendment for one year from the present or any future

expiration date of this Letter of Credit unless at least sixty (60) days prior to the then current expiration date we notify the Beneficiary by registered letter, at the above address (or such other address of which you notify us in writing), that we elect not to consider this Letter of Credit renewed for such additional period. If such notice is given, then during such notice period (i.e., at least sixty (60) day period commencing on the date of such notice and ending with the then applicable expiry date of this Letter of Credit), this Letter of Credit shall remain in full force and effect and Beneficiary may draw up to the full amount of the sum when accompanied by your draft drawn on us at sight as described above in the first paragraph of this Letter of Credit.

If required by any mortgagee of the property on which the premises subject to the above described lease is located, we shall acknowledge the assignment of this Letter of Credit (and/or the proceeds of this Letter of Credit) to such mortgagee at no charge.

We hereby engage with you that drafts drawn and presented in compliance with the terms of this credit will be immediately honored by us if presented at any of our offices or by facsimile transmission at on or before [Expiry Date], as such date may be extended pursuant to the terms hereof.

This Letter of Credit is subject to The Uniform Customs and Practice for Documentary Credits (1993 Revision), International Chamber of Commerce Publication No. 500, which is incorporated by reference herein.

Very truly yours,

- ----------
Authorized Signature

EXHIBIT D

FORM OF CONFIRMATION OF DELIVERY DATE

Reference is made to the Lease dated between , as landlord, and , as tenant (the "LEASE"). The terms listed below are used as defined in the Lease.

Landlord and Tenant confirm the following:

Term Commencement Date: ----------

Delivery Date: ----------

Rent Commencement Date: ----------

Expiration of Initial Term: ----------

Tenant's fax number for purposes of notice: -----

LANDLORD:

By: ----------
Name: ----------
Title: ----------

TENANT:

By: ----------
Name: ----------
Title: ----------

EXHIBIT E

RULES AND REGULATIONS

1. The common entrances, lobbies, elevators, sidewalks, and stairways of the Building and the Property shall not be encumbered or obstructed by Tenant, Tenant's agents, servants, employees, licensees or visitors or used by them for any purposes other than ingress or egress to and from the Building.

2. Landlord reserves the right to have Landlord's structural engineer review Tenant's floor loads on the Building at Tenant's expense.

3. Tenant, or the employees, agents, servants, visitors or licensees of Tenant shall not at any time place, leave or discard any rubbish, paper, articles, or objects of any kind whatsoever outside of the Building. Bicycles shall not be permitted in the Building unless Landlord provides for the parking thereof in the Building.

4. Tenant shall not place objects against glass partitions or doors or windows or adjacent to any common space which would be unsightly from the exterior of the Building and will promptly remove the same upon notice from Landlord.

5. Tenant shall not make noises, cause disturbances, create vibrations, odors or noxious fumes or use or operate any electric or electrical devices or other devices that emit sound waves or that would interfere with the operation of any device or equipment or radio or television broadcasting or reception from or within the Building or elsewhere, or with the operation of roads or highways in the vicinity of the Building and shall not place or install any projections, antennae, aerials, or similar devices inside or outside of the Building, without the prior written approval of Landlord.

6. Tenant shall not: (a) use the Building for lodging, or for any immoral or illegal purposes; (b) use the Building to engage in the manufacture or sale of spirituous, fermented, intoxicating or alcoholic beverages in the Building; (c) use the Building to engage in the manufacture or sale of, or permit the use of, any illegal drugs on the Building.

7. No awning or other projections shall be attached to the outside walls or windows. No curtains, blinds, shades, screens or signs, other than those, if any, furnished by Landlord, shall be attached to, hung in, or used in connection with any exterior window or door of the Building without the prior written consent of Landlord. No sign, advertisement, object, notice or other lettering shall be exhibited, inscribed, painted or affixed on any part of the outside or inside of the Building if visible from

outside of the Building without the prior written consent of Landlord.

8. Door keys, pass cards or similar devices for doors in the Building will be furnished on the Commencement Date by Landlord. If Tenant shall affix additional locks on doors then Tenant shall furnish Landlord with copies of keys or pass cards or similar devices for said locks.

9. Tenant shall cooperate and participate in all reasonable security programs affecting the Building and Property.

10. Tenant assumes full responsibility for protecting its space from theft, robbery and pilferage, which includes keeping doors locked and other means of entry to its space in the Building closed and secured.

11. The water and wash closets and other plumbing fixtures shall not be used for any purposes other than those for which they were constructed, and no sweepings, rubbish, rags, or other substances shall be thrown therein.

12. Discharge of industrial sewage shall only be permitted if Tenant, at its sole expense, shall have obtained and delivered to Landlord all necessary permits and licenses therefor, including without limitation permits from state and local authorities having jurisdiction thereof.

13. The use of asbestos containing cement or other similar asbestos containing adhesive material is expressly prohibited.

14. In the event of any conflict between the provisions of this EXHIBIT E and the provisions of the Lease, the provisions of the Lease shall govern.

EXHIBIT F

ENVIRONMENTAL SUBSTANCES

1. Usual and customary office and cleaning supplies, in quantities normally maintained in offices of the same size and nature as the Premises.

2. Usual and customary office equipment (including copiers and printers).

3. Tenant shall not place, install or operate on the Premises or in any other part of the Building or on the grounds any engine or machinery, or maintain, use or keep any flammable, explosive or hazardous material without the prior written consent of Landlord.

4. Tenant shall not use, keep or permit to be used or kept any foul or noxious gas or substance on, in or around the Premises unless approved by Landlord. Tenant shall not use, keep or permit to be used or kept any flammable or combustible materials without proper governmental permits and approvals.

5. The following equipment (see attached):

BASEMENT SOLVENT INVENTORY NOV 26, 2003

METABOLIX DECLARATION OF TOXIC AND FLAMMABLE SUBSTANCES TO BE USED

Date: December 24th, 2003
Prepared by: H.J. van Walsem, VP Manufacturing, Development and Operations

WASTE AND SOLVENT ROOM (FIRST FLOOR)

QUANTITY PACKAGING	CHEMICAL	TOTAL QUANTITY (GAL)
55 gal drum	Non-Chlorinated Waste Solvent	110
2 56 gal drum	Chlorinated Waste Solvent	110
1 55 gal drum	Solids waste, solvent contaminated	55
10 5 gal drums	Various solvents (2nd floor overflow)	50
SUBTOTAL		275

pH ADJUSTMENT TANK AREA (FIRST FLOOR)

QUANTITY PACKAGING	CHEMICAL	TOTAL QUANTITY (GAL)

---- 3
20 gal
drum
Sulphuric
acid,
98% 60 3
20 gal
drum
Caustic
Soda,
50% 60
500
gal/day
max;
1000
liter/day
Aqueous
Waste
Water to
Sewer
150
gal/day
average

SOLVENT STORAGE ROOM (SECOND FLOOR)

QUANTITY
PACKAGING
CHEMICAL TOTAL
QUANTITY (GAL)
-------- ------
--- -------- --
---------- --- 10 5 gal
drum 1,4
Butanediol 25
10 5 gal drum
Caprylic Acid
25 10 5 gal
drum Caproic
Acid 25 10 5
gal drum Corn
Oil 25 4 5 gal
drum Ethyl
Alcohol 20 5 5
gal drum
Heptane 25 5 5
gal drum Hexane
25 5 5 gal drum
Methyl Isobutyl
Ketone 25 5 5
gal drum
Cyclohexanone
25 5 4 liter
Acetone 5 5 4
liter Butyl
Acetate 5 5 4
liter Ethyl
Acetate 5 10 4
liter
Chloroform 10 4
4 liter
Dichloromethane
4 SUBTOTAL 249

SOLVENT CABINETS FOR SPECIALTY SOLVENTS (SECOND FLOOR)

QUANTITY
PACKAGING
CHEMICAL
TOTAL
QUANTITY
(GAL) -------
- --------- -
------- -----

-- 3 4 liter
1,4 Dioxane 3
2 2 liter 1-
Methyl, 2-
Pyrrolidinone
1 2 2 liter
2-
Methoxyethanol
1 2 4 liter
Methyl
Isobutyl
Ketone 2 1 4
liter
Acetonitrile
1

BASEMENT SOLVENT INVENTORY NOV 26, 2003

AT 21 ERIE (AS REQUIRED FOR LEASE)

DESIGNATION
Flammable solvents
Non-flammable but toxic
Flammable solvents absorbed onto solids materials
Flammable solvents

DESIGNATION
Corrosive but not flammable
Corrosive but not flammable
As per permit to be finalized; typically pH of 5.5-
10.0

DESIGNATION
Combustible but not flammable
Combustible but not flammable
Combustible but not flammable
Combustible but not flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Non-flammable but toxic
Non-flammable but toxic

DESIGNATION
Flammable
Flammable
Flammable
Flammable
Flammable

BASEMENT SOLVENT INVENTORY NOV 26, 2003
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable
Flammable

DESIGNATION
Corrosive Liquid
Corrosive Liquid
Corrosive Liquid

Corrosive Liquid
Corrosive Liquid
Volatile Base (stored in cold storage)
Organic corrosive, pungent

tory.

DESIGNATION
Toxic
Mutagen
Mutagen
Toxic
Toxic in controlled cabinet
Biological inhibitors

DESIGNATION
Biosafety Level 1 microbial strains. Controlled by IBC, all waste deactivated before discharge. Biosafety Level 1 strains handled according to GLP. No pathogens are handled on site.

EXHIBIT G

CONSTRUCTION DOCUMENT REQUIREMENTS

(a) PREPARATION OF CONSTRUCTION DOCUMENTS. The Construction Documents shall include all architectural, mechanical, electrical and structural drawings and detailed specifications for the Tenant Work and shall show all work necessary to complete the Tenant Work including all cutting, fitting, and patching and all connections to the mechanical and electrical systems and components of the Building. Tenants leasing partial floors shall design entrances, doors and any other elements which visually integrate with the elevator lobbies and common areas in a manner and with materials and finishes which are compatible with the common area finishes for such floor. Landlord reserves the right to reject Construction Documents which in its reasonable opinion fail to comply with this provision. The Construction Documents shall include:

(i) MAJOR WORK INFORMATION: A list of any items or matters which might require structural modifications to the Building, including the following:

(1) Location and details of special floor areas exceeding 150 pounds of live load per square foot;
(2) Location and weights of storage files, batteries, HVAC units and technical areas;
(3) Location of any special soundproofing requirements;
(4) Existence of any extraordinary HVAC requirements necessitating perforation of structural members; and
(5) Existence of any requirements for heavy loads, dunnage or other items affecting the structure.

(ii) PLANS SUBMISSION: Two (2) blackline drawings and one (1) CAD disk showing all architectural, mechanical and electrical systems, including cutsheets, specifications and the following:

CONSTRUCTION PLANS:

(1) All partitions shall be shown; indicate ratings of all partitions; indicate all non-standard construction and details referenced;
(2) Dimensions for partition shall be shown to face of stud; critical tolerances and +/- dimensions shall be clearly noted;

(3) All doors shall be shown on and shall be numbered and scheduled on door schedule; indicate ratings of all doors;

(4) All non-standard construction, non-standard materials and/or installation shall be explicitly noted; equipment and finishes shall be shown and details referenced; and

(5) All plumbing fixtures or other equipment requirements and any equipment requiring connection to Building plumbing systems shall be noted.

REFLECTED CEILING PLAN:

(1) Layout suspended ceiling grid pattern in each room, describing the intent of the ceiling working point, origin and/or centering; and

(2) Locate all ceiling-mounted lighting fixtures and air handling devices including air dampers, fan boxes, etc., lighting fixtures, supply air diffusers, wall switches, down lights, special lighting fixtures, special return air registers, special supply air diffusers, and special wall switches.

TELECOMMUNICATIONS AND ELECTRICAL EQUIPMENT PLAN:

(1) All telephone outlets required;

(2) All electrical outlets required; note non-standard power devices and/or related equipment;

(3) All electrical requirements associated with plumbing fixtures or equipment; append product data for all equipment requiring special power, temperature control or plumbing considerations;

(4) Location of telecommunications equipment and conduits; and

(5) Components and design of Tenant's Equipment (including associated equipment) as installed, in sufficient detail to evaluate weight, bearing requirements, wind-load characteristics, power requirements and the effects on Building structure, moisture resistance of the roof membrane

and operations of pre-existing telecommunications equipment.

DOOR SCHEDULE:

(1) Provide a schedule of doors, sizes, finishes, hardware sets and ratings; and

(2) Non-standard materials and/or installation shall be explicitly noted.

HVAC:

(1) Areas requiring special temperature and/or humidity control requirements;

(2) Heat emission of equipment (including catalogue cuts), such as CRTs, copy machines, etc.;

(3) Special exhaust requirements - conference rooms, pantry, toilets, etc.; and

(4) Any extension of system beyond demised space.

ELECTRICAL:

(1) Special lighting requirements;

(2) Power requirements and special outlet requirements of equipment;

(3) Security requirements;

(4) Supplied telephone equipment and the necessary space allocation for same; and

(5) Any extensions of tenant equipment beyond demised space.

PLUMBING:

(1) Remote toilets;

(2) Pantry equipment requirements;

(3) Remote water and/or drain requirements such as for sinks, ice makers, etc.; and

(4) Special drainage requirements, such as those requiring holding or dilution tanks.

ROOF:

Detailed plan of any existing and proposed roof equipment showing location and elevations of all equipment and all new penetrations through the roof including, but not limited to, plumbing, mechanical, and electrical services.

SITE:

Detailed plan, including fencing, pads, conduits, landscaping and elevations of equipment.

SPECIAL SERVICES:

Equipment cuts, power requirements, heat emissions, raised floor requirements, fire protection requirements, security requirements, and emergency power.

(b) PLAN REQUIREMENTS. The Construction Documents shall be fully detailed and fully coordinated with each other and with existing field conditions, shall show complete dimensions, and shall have designated thereon all points of location and other matters, including special construction details and finish schedules. All drawings shall be uniform size and shall incorporate the standard electrical and plumbing symbols and be at a scale of 1/8" = 1'0" or larger. Materials and/or installation shall be explicitly noted and adequately specified to allow for Landlord review, building permit application, and construction. All equipment and installations shall be made in accordance with standard materials and procedures unless a deviation outside of industry standards is shown on the Construction Documents and approved by Landlord. To the extent practicable, a concise description of products, acceptable substitutes, and installation procedures and standards shall be provided. Product cuts must be provided and special mechanical or electrical loads noted. Landlord's approval of the plans, drawings, specifications or other submissions in respect of any work, addition, alteration or improvement to be undertaken by or on behalf of Tenant shall create no liability or responsibility on the part of Landlord for their completeness, design sufficiency or compliance with requirements of any applicable laws, rules or regulations of any governmental or quasi-governmental agency, board or authority.

(c) DRAWING AND DOCUMENT PRODUCTION. Landlord shall provide Tenant with two (2) blackline drawings and one (1) CAD disk showing the Building and site outline, core walls and columns, together with corridor and demising wall location plans.

(d) CHANGE ORDERS. The Construction Documents shall not be materially changed or modified by Tenant after approval by Landlord without the further approval in writing by Landlord, which approval shall not be unreasonably withheld or delayed. Landlord shall not be obligated to approve any change or modification of the Construction Documents which in Landlord's sole opinion shall cause any additional cost or expense to Landlord for which Tenant has not agreed to reimburse Landlord.

EXHIBIT H

TENANT WORK INSURANCE SCHEDULE

TENANT'S LIABILITY INSURANCE

Tenant shall be responsible for requiring all Tenant Contractors doing construction or renovation work to purchase and maintain such insurance as shall protect it from the claims set forth below which may arise out of or result from any Tenant Work whether such Tenant Work is completed by Tenant or by any Tenant Contractor or by any person directly or indirectly employed by Tenant or any Tenant Contractor, or by any person for whose acts Tenant or any Tenant Contractor may be liable:

1. Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Tenant Work

to be performed.

2. Claims for damages because of bodily injury, occupational sickness or disease, or death of employees under any applicable employer's liability law.

3. Claims for damages because of bodily injury, or death of any person other than Tenant's or Tenant Contractor's employees.

4. Claims for damages insured by usual personal injury liability coverage which are sustained (a) by any person as a result of an offense directly or indirectly related to the employment of such person by the Tenant or Tenant Contractor or (b) by any other person.

5. Claims for damages, other than to the Tenant Work itself, because of injury to or destruction of tangible property, including loss of use therefrom.

6. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

Such Tenant Contractors' Commercial General Liability Insurance shall include premises/operations (including explosion, collapse and underground coverage if such Tenant Work involves any underground work), elevators, independent contractors, completed operations, and blanket contractual liability on all written contracts, all including broad form property damage coverage.

Tenant Contractors' Commercial General, Automobile, Employers and Umbrella Liability Insurance shall be written for not less than limits of liability as follows:

a.	Commercial General Liability:	
	Bodily Injury and Property Damage	As Required by EXHIBIT H-1.
b.	Comprehensive Automobile Liability:	
	Bodily Injury and Property Damage	$1,000,000 Each Person $1,000,000 Each Occurrence
c.	Employer's Liability:	
	Each Accident	$ 500,000
	Disease - Policy Limit	$ 500,000
	Disease - Each Employee	$ 500,000
d.	Umbrella Liability:	
	Bodily Injury and Property Damage	As Required by EXHIBIT H-1 (excess of coverages a, b & c above)

All subcontractors for such Tenant Contractors shall carry the same coverages and limits as specified above, unless different limits are specifically negotiated with Landlord.

The foregoing policies shall contain a provision that coverages afforded under the policies shall not be canceled or not renewed until at least sixty (60) days' prior written notice has been given to the Landlord. Certificates of Insurance showing such coverages to be in force shall be filed with the Landlord prior to the commencement of any Tenant Work and prior to each renewal. Coverage for Completed Operations must be maintained for three years following completion of the work and certificates evidencing this coverage must be provided to the Landlord.

The minimum A.M. Best's rating of each insurer shall be A-/VII. Landlord shall be named as an Additional Insured under such Tenant Contractors' Commercial General and Umbrella Liability Insurance policies.

Such Tenant Contractors' responsibilities include:

- Insuring all materials, on an All Risks basis for the full replacement cost, in transit and until delivered to the project site;

- insuring all tools and equipment used in the installation process;

- assuming costs within the deductible(s) if a property loss is caused by any Tenant Contractor's failure to take reasonable steps to prevent

the loss; and

- protecting the site to prevent both natural and man-caused (i.e., arson, theft, vandalism) losses.

PROPERTY INSURANCE LOSS ADJUSTMENT

Any insured loss shall be adjusted with the Landlord and made payable to the Landlord, subject to any applicable mortgagee clause.

EXHIBIT H-1

TENANT CONTRACTOR AND SUBCONTRACTOR INSURANCE LIMIT REQUIREMENTS

Trade Number for Limits Division	Trade Description	Required (See Attached)
1.	Sitework	
	Earthwork	3
	Excavation	5
	Grading	2
	Paving	2
	Piling/Caisson	3
	Retention	4
2.	Concrete	
	Formwork	5
	Precasts	5
	Structural	5
3.	Masonry	
	Masonry	5
4.	Metal and Structural	
	Metal Deck	4
	Miscellaneous Metals	2
	Structural Steel	5
5.	Carpentry	
	Millwork	2
	Rough Carpentry	2
	Wood Doors	2
6.	Moisture Protection	
	Caulking	3
	Dampproofing	3
	Roofing/Sheet Metal	5
	Waterproofing	3

Trade Number for Limits Division	Trade Description	Required (See Attached)
7.	Doors, Windows and Glass	
	Curtainwall	5
	Glass, Glazing and Aluminum	3
	Hardware	1
	Hollow	

Metal Work 1 8. Finishes Acoustic 2 Ceramic & Quarry 2 Covering 2 Lathe, Plaster & Drywall 2 Resilient Floor 2 Paint & Vinyl Wall 2 9. Specialties Access Flooring 1 Partitions 1 Toilet Accessories 1 10. Equipment Crane Operations 4 11. Furnishings Suppliers 1 12. Special Construction Asbestos Abatement 5 Blasting 5 13. Conveying Systems Elevators 5 Escalators 5 Conveyers 3 Dumbwaiters 3 14. Mechanical Fire Protection System 4 Plumbing 4

Trade Number for Limits Division	Trade Description	Required (See Attached)
15.	HVAC	5
16.	Electrical	
	Electrical	5
17.	Demolition	
	More than 3 stories	10
	Three (3) stories or less	5
	General Contractor	
	Major Project	50
	General Contractor Performing the following	

10 Work: (a) new construction under 4 stories and less than 150,000 sq. ft.; (b) construction contract up to $15,000,000; and (c) renovation less the 15% of existing structure.

Any unusual or specialized renovation or repair work undertaken by Tenant's General Contractor with respect to this Lease may require other limits of liability than those listed above. Landlord shall make any determination of revised liability limits in consultation with its risk management staff.

Contractor and Subcontractor Insurance Limit Requirements by Trade Number

The following are Limits of Liability required depending on the Trade Number of the Contractor.

1. $1,000,000 Each Occurrence
   $1,000,000 General Aggregate
   $1,000,000 Products & Completed Operations Aggregate

2. $1,000,000 Each Occurrence
   $2,000,000 General Aggregate
   $2,000,000 Products & Completed Operations Aggregate

3. $2,000,000 Each Occurrence

   $2,000,000 General Aggregate
   $2,000,000 Products & Completed Operations Aggregate
   $1,000,000 Umbrella Each Occurrence/Aggregate

   OR

   $1,000,000 Each Occurrence
   $2,000,000 General Aggregate
   $2,000,000 Products & Completed Operations Aggregate
   $2,000,000 Umbrella Each Occurrence/Aggregate

4. $2,000,000 Each Occurrence
   $2,000,000 General Aggregate
   $2,000,000 Products & Completed Operations Aggregate
   $2,000,000 Umbrella Each Occurrence/Aggregate

   OR

   $1,000,000 Each Occurrence
   $2,000,000 General Aggregate
   $2,000,000 Products & Completed Operations Aggregate
   $3,000,000 Umbrella Each Occurrence/Aggregate

5. $2,000,000 Each Occurrence
   $2,000,000 General Aggregate
   $2,000,000 Products & Completed Operations Aggregate
   $3,000,000 Umbrella Each Occurrence/Aggregate

   OR

   $1,000,000 Each Occurrence
   $2,000,000 General Aggregate
   $2,000,000 Products & Completed Operations Aggregate
   $4,000,000 Umbrella Each Occurrence/Aggregate

10. $2,000,000 Each Occurrence
$2,000,000 General Aggregate
$2,000,000 Products & Completed Operations Aggregate
$8,000,000 Umbrella Each Occurrence/Aggregate

OR

$1,000,000 Each Occurrence
$2,000,000 General Aggregate
$2,000,000 Products & Completed Operations Aggregate
$9,000,000 Umbrella Each Occurrence/Aggregate

50. $ 2,000,000 Each Occurrence
$ 2,000,000 General Aggregate
$ 2,000,000 Products & Completed Operations Aggregate
$49,000,000 Umbrella Each Occurrence/Aggregate

OR

$ 1,000,000 Each Occurrence
$ 2,000,000 General Aggregate
$ 2,000,000 Products & Completed Operations Aggregate
$50,000,000 Umbrella Each Occurrence/Aggregate

EXHIBIT I

BASE BUILDING WORK

PLANS

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A1.01 Level One 12/2/03
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P1.01	Plumbing First Floor Plan	11/21/03
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SPECIFICATIONS

21 ERIE REALTY TRUST November 25, 2003
Tsoi/Kobus & Associates, Inc., Architects, 23019-00

LATEST DATE
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EXHIBIT J

TENANT RELATED WORK

1. Passenger elevator, shaft, and elevator machine room
2. Tenant entry stairs in the lobby along Erie Street
3. Service (back) stairs in the service lobby along Waverly Street
4. Fence enclosures in first floor mechanical room along Merriam Street
5. Rooftop HVAC units servicing the Premises tied into existing ductwork
6. Electrical service from the NSTAR vault to the electrical room in the Storage room on the 2nd floor of the Premises
7. New (future) mechanical shafts from the roof, through the Premises to the 1st floor
8. Structural infill at the 2nd floor of the Premises where the former entry stairs were located

EXHIBIT L

FINISH WORK LETTER

All Finish Work shall be constructed in accordance with the provisions of Section 10.05 of the Lease and this Finish Work Letter, which is incorporated into the Lease by reference.

L.1 CONSTRUCTION DOCUMENTS. Tenant shall prepare, at Tenant's expense (subject to reimbursement from the Finish Work Allowance under Section L.2), Construction Documents (as defined in Section 10.05 of the Lease) for the Finish Work.

In accordance with and subject to the provisions of Section 10.05, Landlord shall approve all of the Finish Work on the Construction Documents.

Landlord has approved, Olson, Lewis & Dioli as Tenant's Architect (as defined in Section 10.05 of the Lease) for the Finish Work. If an architect other than Landlord's architect is selected by Tenant, Tenant shall provide a letter from such architect to Landlord stating that the architect has carefully reviewed the requirements of this Exhibit L, of Section 10.05 of the Lease, of any design manual or handbook provided to Tenant by Landlord with respect to the Finish Work, and of any Finish Work design schedule, and that the architect will comply with all such requirements including without limitation the submission deadlines stated in any Finish Work design schedule. Tenant shall also retain the services of the electrical and mechanical engineers engaged by Landlord for the Base Building Work, as well as Landlord's structural engineer if any portion of Finish Work affects structural components of the Building. Even though such engineers (and architect if Tenant engages Landlord's architect) have been otherwise engaged by Landlord in connection with the Base Building Work, Tenant shall be solely responsible for the liabilities and expenses of all architectural and engineering services relating to the Finish Work (subject to reimbursement from the Finish Work Allowance) and for the adequacy and completeness of the Construction Documents submitted to Landlord. The Construction Documents shall provide for the uniform exterior appearance of the Building, including without limitation the use of Building standard window blinds and Building standard light fixtures within 15 feet of each exterior window.

L.2 FINISH WORK ALLOWANCE. Landlord shall provide Tenant with an allowance for the costs ("Allowance Costs") of constructing Finish Work in the Premises for Tenant's initial occupancy (including, without limitation, architectural and engineering fees with respect thereto up to a maximum amount in the aggregate equal to $5.00 per rentable square foot of the Premises) in an amount not to exceed $1,541,045 (the "Finish Work Allowance"). Notwithstanding the foregoing or anything in the Lease to the contrary, up to $50,000 of the Finish Work Allowance may be used for dismantling, moving, and reusing certain equipment from Tenant's existing facility to and in the Premises and for communications and computer cabling. All construction and design costs for the Premises

in excess of the Finish Work Allowance shall be paid for entirely by Tenant, and Landlord shall not provide any reimbursement therefor.

Landlord shall disburse the Finish Work Allowance at the time and in the manner hereinafter described. For each disbursement, Tenant shall submit a requisition package to Landlord, with an itemization of the costs being requisitioned, a certificate by an officer of Tenant that all such costs are Allowance Costs and have been incurred and paid for (unless Tenant elects for payment directly to Tenant's Contractor or Architect, as set forth below) by Tenant, and appropriate back-up documentation including, without limitation, lien releases to the extent available pursuant to applicable law (in a form approved by Landlord), and paid invoices and bills (from the previous disbursement if Tenant elects for payment directly to Tenant's Contractor or

Architect). The final requisition package shall further include an executed estoppel letter under the Lease and an original certificate of occupancy (provided that if a certificate of occupancy is unavailable at the time of Tenant's final requisition solely on account of the status of any Base Building Work, Tenant shall supply a final certificate of occupancy when it becomes available). At Tenant's election, Landlord shall make disbursements to Tenant and Tenant's Contractor or (with respect to amounts on account of architectural fees) Tenant's Architect. All disbursements shall be made by Landlord within thirty (30) days of Landlord's receipt of Tenant's complete requisition package. Prior to the first disbursement of the Finish Work Allowance, Tenant shall provide Landlord with information as reasonably requested by Landlord to substantiate the complete cost of the Finish Work, such as a certified budget reasonably acceptable to Landlord, (such information, the "CONSTRUCTION BUDGET") and shall provide Landlord with any changes thereto within two (2) business days following any change (such approved costs and expenses, the "CONSTRUCTION EXPENSES"). The Finish Work Allowance shall be payable by Landlord to Tenant on a progress payment basis (but not more frequently than monthly) following the Delivery Date in an amount equal to "LANDLORD'S SHARE" (defined below) of Construction Expenses when and as actually paid (or incurred, if Tenant elects to make payments directly to Tenant's Contractor or Architect) by Tenant. Landlord and Tenant agree that both shall make payment of their respective obligations for the Construction Expenses on a proportionate basis as described below; and after Landlord's disbursement of the Finish Work Allowance, Tenant shall be financially responsible for all remaining Construction Expenses for Tenant's Finish Work. "Landlord's Share" shall mean the fraction (expressed as a percentage), the numerator of which is the entire amount of the Finish Work Allowance and the denominator of which is the entire amount of such Construction Expenses. "TENANT'S EXCESS IMPROVEMENTS COST" means the amount (if a positive number) of the costs paid by Tenant to construct the Finish Work less the Finish Work Allowance. In no event shall Landlord be required to pay more than the Finish Work Allowance. Tenant shall be entitled to a credit against Base Rent if the Finish Work Allowance exceeds the total Construction Expenses required to be funded by Landlord pursuant to this Section L.2, but in any event such credit shall not exceed $10.00 per square foot of the Premises in the aggregate.

L.3 FINISH WORK. Finish Work in the Premises shall be constructed by Tenant

in accordance with, and subject to, the provisions of Section 10.05 of the Lease. Landlord shall not be responsible for any aspects of the design or construction of Finish Work, the correction of any defects therein, or any delays in the completion thereof.

L.4. [Intentionally omitted]

L.5 FINISH WORK CHANGE ORDERS. Tenant may, from time to time, by written order to Landlord on a form specified by Landlord ("Finish Work Change Order"), request a change in the Finish Work shown on the Construction Documents, subject to Landlord's approval as set forth below. The Construction Documents shall not be modified in any material respect except with Landlord's prior written approval; and all modifications to the Construction Documents, whether material or not, shall be made only by Finish Work Change Order submitted to Landlord and approved by Landlord under Section L.6.

L.6 PERFORMANCE OF FINISH WORK BY TENANT. No Finish Work shall be performed except in accordance with the Construction Documents, and any Finish Work Change Orders, approved by Landlord. Landlord may delete from the Construction Documents and any Finish Work Change Order, and need not cause to be performed, any items or aspects of Finish Work which in Landlord's reasonable judgment (i) would delay Base Building Work, (ii) would materially increase the cost of operating the Building or performing any other work in the Building (for the purpose of this clause, "materially" means increases in cost in the aggregate of at least $10,000), (iii) are incompatible with the design, quality, equipment or systems of the Building, (iv) would require unusual expense to readapt the Premises to general purpose office use or (v) otherwise do not comply with the provisions of this Lease (including, without limitation, Section 10.05). By its execution of the Lease, and submission of any Construction Documents and Finish Work Change Orders, Tenant will be deemed to have approved of, and shall be legally responsible for, such Construction Documents and Finish Work Change Orders. Tenant shall be responsible for building standard costs of Building services or facilities (such as electricity, HVAC, and cleaning) required to implement the Finish Work.

L.7 ACCEPTANCE OF EXISTING WORK. Tenant has inspected, and is satisfied with, the "as is" condition of the Premises and the elements of Base Building Work to be constructed therein, as more particularly described on Exhibits I and J of this Lease.

L.8 TENANT PAYMENTS. All payments required to be made by Tenant under this Finish Work Letter (e.g. other than costs of the Finish Work subject to reimbursement out of the Finish Work Allowance), whether to Landlord or to third parties, shall be deemed "Additional Rent" for purposes of Section 4.02 of the Lease.

L.9 TENANT'S AUTHORIZED REPRESENTATIVE. Tenant's Authorized Representative is Johan van Walsem and shall have full power and authority to act on behalf of Tenant on any matters relating to Finish Work.

L.10 ENTRY PRIOR TO COMMMENCEMENT. If and as long as Tenant does not interfere in any material way with the construction of the Base Building Work, including the Tenant Related Work (by causing disharmony, scheduling or coordination difficulties, etc.), Tenant may, with prior approval of Landlord (which shall not be unreasonably withheld), and at Tenant's sole risk and expense, enter the Premises prior to the Term Commencement Date for the purpose of commencing the Finish Work. Upon completion of the Construction Documents for Tenant's Finish Work, Landlord, Tenant, Landlord's contractor, and Tenant's Contractor shall meet to prepare a schedule to coordinate the Base Building Work and the Finish Work in a manner so that all such work can be completed in an expeditious and efficient manner (the "Coordination Schedule").

Prior to the Term Commencement Date Tenant shall comply with and perform, and shall cause its employees, agents, contractors, subcontractors, material suppliers and laborers to comply with and perform, all Tenant's obligations under this Lease except the obligations to pay Base Rent and Additional Rent and other charges and other obligations the performance of which would be clearly incompatible with the installation of Finish Work.

Any Tenant Contractor (or any employee or agent of Tenant) performing any work in the Premises prior to the Delivery Date shall be subject to all of the terms, conditions and requirements of the Lease. Neither Tenant nor any Tenant Contractor shall interfere in any way with construction of, nor damage, the Base Building Work, and shall do all things reasonably requested by Landlord to expedite construction of the Base Building Work, consistent with the Coordination Schedule. Without limitation, Tenant shall require each Tenant Contractor to adjust and coordinate any work or installation in or to the Premises to meet the schedule or requirements of other work being performed by or for Landlord throughout the Property which shall in all cases have precedence. If Tenant or any Tenant Contractor fails so to adjust to the schedule or requirements of Landlord, then such failure shall constitute Tenant Delay (as hereafter defined). Neither Tenant nor any Tenant Contractor shall cause any labor disharmony with Landlord's contractor, and Tenant shall be responsible for all costs required to produce labor harmony in connection with an entry under this Section and shall comply with any provisions of the Lease governing labor harmony. In all events, Tenant shall indemnify the Indemnitees in the manner provided in Section 9.02 of the Lease against any claim, loss or cost arising out of any interference with, or damage to, the Base Building Work or any other work at the Property or any increase in the cost thereof on account in whole or in part of any act, omission, neglect or default by Tenant or any Tenant Contractor. Without limiting the generality of the foregoing, to the extent that the commencement or performance of Base Building Work is delayed on account in whole or in part of any act, omission, neglect, or default by Tenant or any Tenant Contractor, then such delay shall constitute a Tenant Delay as provided herein.

Any requirements of any such Tenant Contractor for services from Landlord or Landlord's contractor, such as hoisting, electrical or mechanical needs, shall be paid for by Tenant (from the Finish Work Allowance to the extent available pursuant to Section L.2) and arranged between such Tenant Contractor and Landlord or Landlord's contractor. Should the work of any Tenant Contractor depend on the installed field conditions of any item of the Base Building Work, such Tenant Contractor shall ascertain such field conditions after installation of such item of the Base Building Work. Neither Landlord nor Landlord's contractor shall ever be required or obliged to alter the method, time or manner for performing any of the Base Building Work, or work elsewhere on the Property, on account of the work of any such Tenant Contractor; however, Landlord and Landlord's contractor shall utilize reasonable efforts to cause such work to be performed consistent with the Coordination Schedule. Should Landlord's contractor, including subcontractors working under such contractor, damage or delay the work of any Tenant Contractor, then such Tenant Contractor, by entering on the Premises, shall be deemed to have agreed not to prosecute any claim against Landlord, but shall look solely to Landlord's contractor (or such contractor's subcontractors) that allegedly caused the damage or delay. If any such Tenant Contractor ever makes a claim against any Indemnitee (as such term

is defined in Section 9.02) directly, then Tenant shall indemnify such Indemnitee in the manner provided in the Lease against such claim so long as such Tenant Contractor's loss was not caused solely and directly by the negligence or willful and wrongful act of such Indemnitee. Tenant shall cause each Tenant Contractor performing work on the Premises to clean up regularly and remove its debris from the Premises and Property. If any Tenant Contractor fails so to clean up, then Landlord may cause its contractor to clean up and remove debris, and Tenant shall pay all costs (including administrative costs) of such cleanup and removal.

L.11. TENANT DELAYS. A delay in the commencement, performance or completion of the Base Building Work as a result of any of the following is referred to as a "TENANT DELAY":

(i) any request by Tenant that Landlord delay the commmencement of, or suspend the performance of, any Base Building Work (it being agreed that Landlord is not required to comply with such request and may decline to comply therewith in its sole discretion), or

(ii) any other act or omission of Tenant, any Tenant Contractor (as defined in Section 10), or any of their officers, employers, agents, or contractors.

For each day of Tenant Delay that causes the Delivery Date to occur after February 1, 2004, the Delivery Date and Rent Commencement Date and Tenant's obligation to pay Rent and additional charges shall be accelerated accordingly.

EXHIBIT M

INITIAL WARRANT

THIS WARRANT HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR ANY APPLICABLE STATE SECURITIES LAWS, AND MAY NOT BE SOLD OR TRANSFERRED UNLESS SUCH SALE OR TRANSFER IS IN ACCORDANCE WITH THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS OR SOME OTHER EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF SUCH ACT AND APPLICABLE LAWS IS AVAILABLE WITH RESPECT THERETO.

COMMON STOCK PURCHASE WARRANT

Warrant No._____ Number of Shares 5,000

METABOLIX, INC.

COMMON STOCK PURCHASE WARRANT

Void Unless Exercised Before
the Ten-Year Anniversary of Term Commencement Date

1. ISSUANCE. This Warrant is issued to 21 Erie Realty Trust by Metabolix, Inc., a Delaware corporation (hereinafter with its successors called the "Company"). This Warrant is issued in connection with that certain lease agreement, dated as of December 29, 2003, by and among the Company and 21 Erie Realty Trust (the "Lease Agreement").

2. PURCHASE PRICE; NUMBER OF SHARES. Subject to the terms and conditions hereinafter set forth, the registered holder of this Warrant (the "Holder"), commencing on the Term Commencement Date (as defined in the Lease Agreement), is entitled upon surrender of this Warrant with the subscription form annexed hereto duly executed, at the office of the Company, 303 Third Street, Cambridge, Massachusetts 02142, or such other office as the Company shall notify the Holder of in writing, to purchase from the Company at a price per share (the "Purchase Price") of $2.70, fully paid and nonassessable shares of Common Stock, $.01 par value, of the Company (the "Common Stock"). Until such time as this Warrant is exercised in full or expires, the Purchase Price and the securities issuable upon exercise of this Warrant are subject to adjustment as hereinafter provided.

3. PAYMENT OF PURCHASE PRICE. The Purchase Price may be paid (i) in cash or by check, (ii) by the surrender by the Holder to the Company of any promissory notes or other obligations issued by the Company, with all such notes and obligations so surrendered being credited against the Purchase Price in an amount equal to the principal amount thereof plus

accrued interest to the date of surrender, (iii) through delivery by the Holder to the Company of other securities issued by the Company, with such securities being credited against the Purchase Price in an amount equal to the fair market value thereof, as determined in good faith by the Board of Directors of the Company (the "Board"), or (iv) by any combination of the foregoing. The Board shall promptly respond in writing to an inquiry by the Holder as to the fair market value of any securities the Holder may wish to deliver to the Company pursuant to clause (iii) above.

4. NET ISSUE ELECTION. The Holder may elect to receive, without the payment by the Holder of any additional consideration, shares equal to the value of this Warrant or any portion hereof by the surrender of this Warrant or such portion to the Company, with the net issue election notice annexed hereto duly executed, at the office of the Company. Thereupon, the Company shall issue to the Holder such number of fully paid and nonassessable shares of Common Stock as is computed using the following formula:

$$X = \frac{Y\,(A-B)}{A}$$

where

X = the number of shares to be issued to the Holder pursuant to this Section 4.

Y = the number of shares covered by this Warrant in respect of which the net issue election is made pursuant to this Section 4.

A = the fair market value of one share of Common Stock, as determined in good faith by the Board, as at the time the net issue election is made pursuant to this Section 4.

B = the Purchase Price in effect under this Warrant at the time the net issue election is made pursuant to this Section 4.

The Board shall promptly respond in writing to an inquiry by the Holder as to the fair market value of one share of Common Stock.

5. PARTIAL EXERCISE. This Warrant may be exercised in part, and the Holder shall be entitled to receive a new warrant, which shall be dated as of the date of this Warrant, covering the number of shares in respect of which this Warrant shall not have been exercised.

6. ISSUANCE DATE. The person or persons in whose name or names any, certificate representing shares of Common Stock is issued hereunder shall be deemed to have become the holder of record of the shares represented thereby as at the close of business on the date this Warrant is exercised with respect to such shares, whether or not the transfer books of the Company shall be closed.

7. EXPIRATION DATE. Unless terminated sooner as provided in Section 10, this Warrant shall expire at the close of business on the ten-year anniversary of the Term Commencement Date, and shall be void thereafter.

8. RESERVED SHARES; VALID ISSUANCE. The Company covenants that it will at all times from and after the Term Commencement Date reserve and keep available such number of its authorized shares of Common Stock, free from all preemptive or similar rights therein, as will be sufficient to permit the exercise of this Warrant in full. The Company further covenants that such shares as may be issued pursuant to the exercise of this Warrant will, upon issuance, be duly and validly issued, fully paid and nonassessable and free from all taxes, liens and charges with respect to the issuance thereof.

9. DIVIDENDS. If, after the Term Commencement Date, the Company shall subdivide the Common Stock, by split-up or otherwise, or combine the Common Stock, or issue additional shares of Common Stock in payment of a stock dividend on the Common Stock, the number of shares issuable on the exercise of this Warrant shall forthwith be proportionately increased in the case of a subdivision or stock dividend, or proportionately decreased in the case of a combination, and the Purchase Price shall forthwith be proportionately decreased in the case of a subdivision or stock dividend, or proportionately increased in the case of a combination.

10. MERGERS AND RECLASSIFICATIONS. If after the Term Commencement Date there shall be any (x) reclassification, capital reorganization or change of the Common Stock (other than as a result of a subdivision, combination or stock

dividend provided for in Section 9 hereof), or (y) any consolidation of the Company with, or merger of the Company into, another corporation or other business organization (other than a consolidation or merger in which the Company is the continuing corporation and which does not result in any reclassification or change of the outstanding Common Stock), or (z) any sale or conveyance to another corporation or other business organization of all or substantially all of the assets of the Company, then, as a condition of such reclassification, capital reorganization, change, consolidation, merger, sale or conveyance, lawful provisions shall be made, and duly executed documents evidencing the same from the Company or its successor shall be delivered to the Holder, so that the Holder shall thereafter have the right to purchase, at a total price not to exceed that payable upon the exercise of this Warrant in full, the kind and amount of shares of stock and other securities and property receivable upon such reclassification, capital reorganization, change, consolidation, merger, sale or conveyance by a holder of the number of shares of Common Stock which might have been purchased by the Holder immediately prior to such reclassification, capital reorganization, change, consolidation, merger, sale or conveyance, and in any such case appropriate provisions shall be made with respect to the rights and interest of the Holder to the end that the provisions hereof shall thereafter be applicable in relation to any shares of stock or other securities and property thereafter deliverable upon exercise hereof. Notwithstanding the foregoing, if, in connection with any consolidation, merger, sale or conveyance described in clauses (y) or (z), above, the Company shall be required to cause this Warrant to be terminated prior to the consummation of such transaction, the Company shall provide written notice of such termination

event to the Holder and this Warrant shall terminate on the date that is 30 days after the date of such notice to the Holder, and shall be void thereafter.

11. FRACTIONAL SHARES. In no event shall any fractional share of Common Stock be issued upon any exercise of this Warrant. If, upon exercise of this Warrant as an entirety, the Holder would, except as provided in this Section 11, be entitled to receive a fractional share of Common Stock, then the Company shall pay to the Holder, in cash or by check, the cash value of such fractional share, based upon the fair market value of one share of Common Stock as of the date of exercise, as determined in good faith by the Board.

12. CERTIFICATE OF ADJUSTMENT. Whenever the Purchase Price is adjusted, as herein provided, the Company shall promptly deliver to the Holder a certificate setting forth the Purchase Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

13. NOTICES OF RECORD DATE, ETC. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right,

(b) any reclassification of the capital stock of the Company, capital reorganization of the Company, consolidation or merger involving the Company, or sale or conveyance of all or substantially all of its assets, or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company,

then and in each such event the Company will mail or cause to be mailed to the Holder a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, or (ii) the date on which any such reclassification, capital reorganization, consolidation, merger, sale or conveyance, dissolution, liquidation or winding-up is to take place, and the time, if any is to be fixed, as of which the holders of record in respect of such event are to be determined. Such notice shall be mailed at least 5 business days (unless a longer period is required pursuant to the terms of Section 10, above) prior to the date specified in such notice on which any such action is to be taken.

14. INVESTMENT REPRESENTATIONS. By accepting this Warrant, the Holder represents and warrants that (a) the Holder is an "accredited investor" as that term is defined in Rule 501(a) of Regulation D promulgated under the Securities Act of 1933, (b) the Holder is acquiring the Warrant for its own account, and not with a view to distribution or resale in violation of the Securities Act of 1933, and (c) the Holder will not sell or transfer the Warrant without

registration under applicable federal and state securities laws, or the availability of exemptions therefrom, and then, only in accordance with Section 16 hereof.

15. AMENDMENT. The terms of this Warrant may be amended, modified or waived only with the written consent of the Company and the Holder.

16. WARRANT REGISTER; LOST WARRANT, ETC.

A. The Company will maintain a register containing the name and address of the registered Holder of this Warrant. The Holder may change its address as shown on the warrant register by written notice to the Company requesting such change. Any notice or written communication required or permitted to be given to the Holder may be given by certified mail or delivered to the Holder at its address as shown on the warrant register.

B. In case this Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue a new warrant of like tenor and denomination and deliver the same (i) in exchange and substitution for and upon surrender and cancellation of any mutilated Warrant, or (ii) in lieu of any Warrant lost, stolen or destroyed, upon receipt of evidence reasonably satisfactory to the Company of the loss, theft or destruction of such Warrant (including a reasonably detailed affidavit with respect to the circumstances of any loss, theft or destruction) and of indemnity reasonably satisfactory to the Company.

C. Subject to (i) the prior written consent of the Company, which consent shall not be unreasonably withheld, provided, however, that in no event shall the Company's consent be required in connection with the transfer of this Warrant with respect to all or any of the shares purchasable hereunder in connection with a sale or financing of the premises described in the Lease Agreement, and (ii) compliance with applicable federal and state securities laws, this Warrant may be transferred by the Holder with respect to any or all of the shares purchasable hereunder. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, for transfer of this Warrant as an entirety by the Holder in accordance with this Section 16, the Company shall issue a new warrant of the same denomination to the assignee. Upon surrender of this Warrant to the Company, together with the assignment hereof properly endorsed, by the Holder for transfer in accordance with this Section 16 with respect to a portion of the shares of Common Stock purchasable hereunder, the Company shall issue a new warrant to the assignee, in such denomination as shall be requested by the Holder hereof, and shall issue to such Holder a new warrant covering the number of shares in respect of which this Warrant shall not have been transferred.

17. NO IMPAIRMENT. The Company will not, by amendment of its Amended and Restated Certificate of Incorporation or through any reclassification, capital reorganization, consolidation, merger, sale or conveyance of assets, dissolution, liquidation, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to

protect the rights of the Holder; provided, however, that the Company may cause this Warrant to be terminated as provided in Section 10.

18. GOVERNING LAW. The provisions and terms of this Warrant shall be governed by and construed in accordance with the internal laws of the Commonwealth of Massachusetts without regard for the conflict of laws principles therein.

19. SUCCESSORS AND ASSIGNS. This Warrant shall be binding upon the Company's successors and assigns and shall inure to the benefit of the Holder's successors, legal representatives and permitted assigns.

20. BUSINESS DAYS. If the last or appointed day for the taking of any action required or the expiration of any right granted herein shall be a Saturday or Sunday or a legal holiday in Massachusetts, then such action may be taken or right may be exercised on the next succeeding day which is not a Saturday or Sunday or such a legal holiday.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

METABOLIX, INC.

Dated:
----------, 2004

By:

Name: Dr. James Barber
Title: President

(Corporate Seal)

Attest:

- ---

SUBSCRIPTION
(To be signed only on exercise of Warrant)

To: Metabolix, Inc. Date:_____

The undersigned hereby subscribes for _____ shares of Common Stock covered by this Warrant. The certificate(s) for such shares shall be issued in the name of the undersigned or as otherwise indicated below:

Signature

Name for Registration

Mailing Address

NET ISSUE ELECTION NOTICE

To:_____ Date:_____

The undersigned hereby elects under Section 4 to surrender the right to purchase _____ shares of Common Stock pursuant to this Warrant. The certificate(s) for the shares issuable upon such net issue election shall be issued in the name of the undersigned or as otherwise indicated below.

Signature

Name for Registration

Mailing Address

ASSIGNMENT
(To be signed only on transfer of Warrant)

For value received _____ hereby sells, assigns and transfers unto _____

_____
(Please print or typewrite name and address of Assignee)

_____
the right represented by the within Warrant, and does hereby irrevocably constitute and appoint _____ its attorney to transfer the within Warrant on the books of the within named Company with full power of substitution on the premises.

Dated:_____

In the Presence of:

_____

EXHIBIT N

FIRST OFFER SPACE

[Diagram of the first floor.]

EXHIBIT O

TERMINATION PAYMENT EXAMPLE

Assuming a brokerage commission of $550,000, with a termination date on the last day of the 5th Lease Year, and no increases in CPI over the term of the lease up to the termination date, the Termination Payment would be calculated as follows:

(1) The Finish Work Allowance of $1,585,980 amortized over 120 months without interest = $13,216.5 per month.

$13,216.5 per month x 60 months remaining in the Initial Term = $792,990 unamortized as of the termination date.

(2) The brokerage commission of $550,000 amortized over 120 months without interest = $4,583.33 per month.

$4,583.33 per month x 60 months = $275,000.

(3)$792,990 + $275,000 = $1,067,990

(4)(Then-effective Base Rent of $64,881 per month x 60)/15 = $259,524

(5)$1,067,990 plus $259,524 = Termination Payment of $1,327,514

(In any event, the Termination Payment will not be less than two times the monthly Base Rent).

EXHIBIT P

STANDARD FORM OF CONSENT TO A SUBLEASE

CONSENT TO SUBLEASE
21 ERIE STREET

THIS CONSENT TO SUBLEASE ("Consent Agreement") dated as of_____, 200_, is made with reference to that certain sublease (the "Sublease") dated _____, 200_, by and between _____, with an address at _____("Tenant") and_____, with an address at _____ ("Subtenant"), and is entered into by and among 21 Erie Realty Trust, with an address in care of c/o Lyme Properties, LLC, 101 Main Street, 18th Floor, Cambridge, MA 02142 (together with its successors and assigns, "Landlord"), Tenant and Subtenant, with reference to the following facts:

(A) Landlord and Tenant are the parties to that certain lease dated as of _____, 200_ ("Master Lease") with respect to the Premises (as defined in the Master Lease) located in the building known as 21 Erie Street (the "Building");

(B) Tenant and Subtenant wish to enter into the Sublease;

(C) The Master Lease provides, inter alia, that Tenant may not enter into the Sublease without Landlord's prior written consent;

(D) Tenant and Subtenant have presented the fully executed Sublease (a true copy of which is attached hereto) to Landlord in connection with

Tenant's request for such consent, upon all of the terms and conditions hereinafter appearing.

NOW, THEREFORE, for good and valuable consideration, the parties agree as follows:

1. Landlord hereby consents to Tenant entering into the Sublease upon the terms and conditions set forth below.

2. This Consent shall not release Tenant from any existing or future duty, obligation or liability to Landlord pursuant to the Master Lease, nor shall this Consent change, modify or amend the Master Lease in any manner, notwithstanding anything to the contrary in the Sublease. Without limiting the generality of the foregoing, (a) this Consent shall not relieve Tenant from any requirement set forth in the Master Lease that Tenant obtain Landlord's prior written approval of any other subleases, assignments or other dispositions of Tenant's interest in the Master Lease or the Premises (except as may be

expressly set forth in the Master Lease) or of Subtenant's interest in the Sublease or the demised premises thereunder, and (b) this Consent shall not constitute Landlord's consent to any alteration of the Premises.

3. (a) In the event of a Master Lease Termination (as hereinafter defined), at the written request and sole option of Landlord, Subtenant agrees to attorn to Landlord and to recognize Landlord as Subtenant's landlord under the Sublease, upon the terms and conditions and at the rental rate specified in the Sublease, and for the then remaining term of the Sublease, except that Landlord shall not be bound by any provision of the Sublease that in any way increases Landlord's duties, obligations or liabilities to Subtenant beyond those owed to Tenant under the Master Lease or by any provision that grants or attempts to grant Subtenant any rights, privileges or benefits greater than those possessed by Tenant under the Master Lease. Subtenant hereby waives any provisions of applicable law that may permit Subtenant (i) to terminate the Sublease other than pursuant to its terms or (ii) to surrender possession of the subleased premises in the event of a Master Lease Termination; and Subtenant hereby agrees that the Sublease shall not be affected in any way whatsoever by a Master Lease Termination in the event Landlord requests Subtenant's attornment to and recognition of Landlord except as set forth herein. In the event of a Master Lease Termination as to which Landlord does not so request Subtenant's attornment to and recognition of Landlord as set forth above, the Sublease shall terminate.

In no event shall Landlord ever (i) be liable to Subtenant for any act, omission or breach of the Sublease by Tenant, (ii) be subject to any offsets or defense that Subtenant might have against Tenant, (iii) be bound by any rent or additional rent that Subtenant might have paid in advance to Tenant, or (iv) be bound to honor any rights of Subtenant in any security deposit placed by Subtenant except to the extent Tenant has specifically assigned and turned over such security deposit to Landlord as set forth below.

Tenant hereby agrees that in the event of a Master Lease Termination, Tenant shall immediately pay or transfer to Landlord any security deposits, rent, or other sums then held by Tenant in connection with the subleasing of the Premises. Subtenant hereby agrees that under no circumstances whatsoever shall Landlord be held in any way responsible or accountable for any security deposit or any sums paid by Subtenant to Tenant except to the extent that Landlord has actually received such sums from Tenant and has acknowledged their source, and Subtenant shall have no claim to any security or other deposit made by Tenant under the Master Lease.

(b) "Master Lease Termination" means any event that, by voluntary or involuntary act or by operation of law, might cause or permit the Master Lease (or Tenant's right to possess the Premises under the Master Lease) to be terminated, expire, be canceled, be foreclosed against, or otherwise come to an end, including but not limited to (1) a default by Tenant under the Master Lease or any of the terms and provisions

hereof; (2) foreclosure proceedings brought by the holder of any mortgage or deed of trust to which the Master Lease is subject; (3) the termination of Tenant's leasehold estate by dispossession proceeding or otherwise; or (4) the expiration or termination of the Master Lease in accordance with its terms.

4. Subtenant shall be liable to Landlord, jointly and severally with Tenant, to the extent of the obligations undertaken by or attributable to

Subtenant under the Sublease, for the performance of Tenant's agreements under the Master Lease. Landlord may elect to receive directly from Subtenant all sums due or payable to Tenant by Subtenant pursuant to the Sublease, and upon receipt of Landlord's notice, Subtenant shall thereafter pay to Landlord any and all sums becoming due or payable under the Sublease and Tenant shall receive from Landlord a corresponding credit for such sums actually received by Landlord against any and all payments then owing from Tenant under the Master Lease. Neither the service of such written notice nor the receipt of such direct payments shall cause Landlord to assume any of Tenant's duties, obligations and/or liabilities under the Sublease, nor shall such event impose upon Landlord the duty or obligation to honor the Sublease in the event of a Master Lease Termination, nor subsequently to accept any purported attornment by Subtenant not elected by Landlord pursuant to Section 3(a) hereof.

5. Subtenant hereby acknowledges that it is familiar with all of the terms and provisions of the Master Lease and agrees not to do or omit to do anything that would cause Tenant to be in breach of the Master Lease. Any such act or omission shall also constitute a breach of the Master Lease, and this Consent and shall entitle Landlord to recover any damage, loss, cost, or expense that it thereby suffers from Tenant and Subtenant, jointly and severally. Without limiting the generality of the foregoing, Subtenant shall comply with and be subject to the provisions of the Master Lease regarding Tenant's insurance (to the extent the same relate to the subleased premises) and waivers of subrogation and, upon Landlord's request from time to time, shall provide Landlord with such evidence of such compliance. To the extent that any provision of the Sublease is inconsistent with the provisions of the Master Lease, Subtenant agrees that it shall be bound by any stricter provision set forth in the Master Lease.

6. Tenant and Subtenant, jointly and severally, shall be liable to reimburse Landlord for any expenses, including reasonable attorneys' fees, incurred in enforcing any of the terms or provisions of this Consent.

7. Tenant and Subtenant represent and warrant to Landlord that the copy of the Sublease attached hereto is a true and complete copy of the Sublease, that there are no other agreements (oral or written) between Tenant and Subtenant with respect to the subleased premises, and that no termination or modification of the Sublease will be binding upon Landlord unless Landlord shall have given its prior written consent thereto. If the Master Lease has been guaranteed, then Tenant shall deliver to Landlord a written approval

of the Sublease and this Consent by each such guarantor.

8. The agreements contained herein constitute the entire understanding between the parties with respect to the subject matter hereof, and shall supersede all prior agreements, written or oral. Tenant and Subtenant warrant and agree that neither Landlord nor any of its agents or other representatives have made any representations concerning the Premises, their condition, the Sublease, or the Master Lease.

9. Notice required or desired to be given hereunder shall be effective either upon personal delivery or three (3) business days after deposit in the United States mail, by registered or certified mail, return receipt requested, addressed to parties at the addresses set forth in this Consent (and if no addresses are so listed, then to the Landlord at the address set forth in the Master Lease for the payment of rent, or to Tenant or Subtenant at the address of the Premises or of the subleased premises, respectively). Any party may change its address for notice by giving notice in the manner hereinabove provided.

10. Neither the Master Lease, the Sublease nor this Consent shall be deemed, nor are they intended, to grant to Subtenant any rights whatsoever against Landlord. Subtenant hereby acknowledges and agrees that its sole remedy for any alleged or actual breach of its rights in connection with the Sublease shall be solely against Tenant. Subtenant acknowledges and agrees that it is not a third party beneficiary under the Master Lease and is not entitled to assert any of Tenant's rights thereunder against Landlord, whether in its own right or on behalf of Tenant.

11. Tenant and Subtenant agree, jointly and severally, to indemnify and hold Landlord harmless from and against any loss, cost, expense, damage, or liability, including reasonable attorneys' fees, incurred as a result of a claim by any person or entity (i) that it is entitled to a commission, finder's fee or like payment in connection with the Sublease or (ii) relating to or arising out of the Sublease or any related agreements or dealings.

12. Tenant shall promptly pay Landlord's expenses incurred in

connection with Tenant's request for consent of this Sublease, as and to the extent provided in the Master Lease.

13. Landlord shall not be considered to have consented to the Sublease until this Consent is executed and delivered by Landlord, Tenant, and Subtenant and approved by the holder of any mortgage on the Building having a right to approve the Sublease. Any liability of Landlord to Tenant under or in connection with this Consent, and any liability of Landlord to Subtenant, including without limitation liability under or in connection with the Sublease or arising in any way from Subtenant's use or occupancy of the subleased premises, shall be limited to the same extent as Landlord's liability to Tenant is limited under the Master Lease.

14. This Consent shall be binding upon and shall inure to the benefit of Landlord, Tenant, and Subtenant and their respective successors and permitted assigns.

15. This Consent may be executed in multiple counterparts, each of which shall be deemed an original and all of which together shall constitute a single agreement, and shall be governed by the laws of The Commonwealth of Massachusetts.

EXECUTED under seal as of the date first written above.

LANDLORD:

21 ERIE REALTY TRUST

By:

TENANT:

METABOLIX, INC.

By:

Name:

Title:

SUBTENANT

Name:
Title:

EXHIBIT 10.16

FIFTH AMENDED AND RESTATED STOCKHOLDERS' AGREEMENT

THIS FIFTH AMENDED AND RESTATED STOCKHOLDERS' AGREEMENT (the "AGREEMENT"), is made and entered into as of January 19, 2006, by and among Metabolix, Inc., a corporation organized under the laws of the State of Delaware (the "COMPANY"), the holders of the Company's common stock, $.01 par value ("COMMON STOCK") or preferred stock, $.01 par value ("PREFERRED STOCK") listed on Exhibit A (the "EXISTING STOCKHOLDERS") and any additional stockholder of the Company (collectively, the "ADDITIONAL STOCKHOLDERS", and with the Existing Stockholders, the "STOCKHOLDERS") who becomes a party hereto by signing an Additional Stockholder Signature Page (an "ADDITIONAL STOCKHOLDER SIGNATURE PAGE") in the form attached hereto as EXHIBIT B.

WHEREAS, the Company and the Existing Stockholders are parties to that certain Fourth Amended and Restated Stockholders' Agreement dated as of April 2, 2004 (the "FOURTH AMENDED STOCKHOLDERS' AGREEMENT");

WHEREAS, certain purchasers (the "PURCHASERS") are acquiring shares of Series 05 Convertible Preferred Stock, $.01 par value per share, (the "SERIES 05 PREFERRED STOCK") pursuant to that certain Series 05 Preferred Stock Purchase Agreement (the "PURCHASE AGREEMENT") by and between the Company and the Purchasers;

WHEREAS, pursuant to Section 6.4 of the Fourth Amended Stockholders' Agreement, the Fourth Amended Stockholders' Agreement may be amended upon the written consent of the Company and each of Edward M. Giles, State Farm Mutual Automobile Insurance Company, Vertical Fund I, L.P. and Vertical Fund II, L.P.; and

WHEREAS, as an inducement to the Purchasers to purchase the Series 05 Preferred Stock pursuant to the Purchase Agreement the parties hereto desire to amend the Fourth Amended Stockholders' Agreement on the terms and conditions set forth herein.

NOW THEREFORE, in consideration of the premises and of the mutual promises hereinafter set forth, the parties hereby agree to amend and restate the Fourth Stockholders' Agreement in its entirety as follows:

ARTICLE I

COVENANTS OF THE COMPANY

1.1 CORPORATE EXISTENCE. The Company shall maintain its corporate existence and qualification and make no material change (directly or through subsidiaries) in the present nature of the Company's business without the consent of a majority of the Stockholders.

1.2 RULE 144 COMPLIANCE. With a view to making available the benefits of certain rules and regulations of the Securities and Exchange Commission (the "COMMISSION") which may permit the sale of the shares to the public without registration, at all times after ninety (90) days after a registration statement covering an initial public offering of securities of the Company

under the Securities Act of 1933, as amended (the "1933 ACT") shall have become effective, the Company agrees to: (i) make and keep public information available, as those terms are understood and defined in Rule 144 under the 1933 Act; (ii) use commercially reasonable efforts to file with the Commission in a timely manner all reports and other documents required of the Company under the 1933 Act and the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"); (iii) furnish to each holder of Registrable Securities (as hereinafter defined) forthwith upon request a written statement by the Company as to the Company's compliance with the reporting requirements of Rule 144 and of the 1933 Act and the Exchange Act, a copy of the most recent annual or quarterly report of the Company, and such other reports and documents so filed by the Company as such holder may reasonably request in availing itself of any rules or regulation of the Commission allowing such holder to sell any Registrable Securities (as hereinafter defined) without registration; and (iv) use commercially reasonable efforts to satisfy the requirements of all such rules and regulations (including the requirements for current public information, registration under the Exchange Act and timely reporting to the Commission) at the earliest possible date after its first registered public offering.

1.3 FINANCIAL INFORMATION.

(a) As soon as practicable after the end of each fiscal year, and in any event within 120 days thereafter, the Company agrees to provide the Stockholders with copies of consolidated balance sheets of the Company as of the end of such fiscal year, and consolidated statements of income and consolidated statements of changes in cash flow of the Company for such fiscal year, prepared in accordance with generally accepted accounting principles, all in reasonable detail and reviewed by independent public accountants selected by the Company.

(b) As soon as practicable after the end of the first, second and third quarterly accounting periods in each fiscal year of the Company, the Company agrees to provide the Stockholders with copies of a consolidated balance sheet of the Company as of the end of each such quarterly period, and consolidated statements of income and consolidated statements of change in cash flow of the Company for such period and for the current fiscal year to date, if and to the extent that such statements are prepared by the Company.

ARTICLE II

REGISTRATION RIGHTS

2.1 PIGGYBACK REGISTRATION RIGHTS. Whenever the Company proposes to register any stock or other securities for the Company's own or others' account under the 1933 Act for a public offering for cash, other than in its initial public offering or in a registration on Form S-4 or S-8 under the 1933 Act or any successor forms thereto, the Company shall give each holder of Registrable Securities written notice prior to such registration. Upon the written request of any such holder given within twenty (20) days after receipt of such notice, the Company will use its best efforts to cause to be included in such registration all of the Registrable Securities that such holder requests to be registered.

2.2 DEMAND REGISTRATION RIGHTS. At any time after the Company becomes subject to the periodic reporting requirements of Section 13 or Section 15(d) of the Exchange Act, one or more of the holders of at least 30% of the Registrable Securities may make a written request for registration (a "DEMAND REGISTRATION") under the 1933 Act with respect to all or part of the Registrable Securities owned by the Stockholder. Any such request must specify the number and type of Registrable Securities proposed to be sold by the Stockholder and the intended method of disposition. Upon receipt of such written request, the Company will notify all holders of all Registrable Securities of the request. Upon written request of any holder given within 20 days after receipt by such holder from the Company of such notification, the Company will use its best efforts to cause such of the Registrable Securities as may be requested by any holder thereof (including the holder or holders giving the initial notice of intent to offer) to be registered under the Securities Act as expeditiously as possible; provided, however, that the minimum market value of any offering and registration of Registrable Securities made pursuant to this Section 2.2 shall be at least $2,000,000. However, the Company will be entitled to postpone, for a reasonable period of time but in no event more than 180 days after the date of its receipt of such a request pursuant to this Section 2.2, the filing of any registration statement or offering and sale, if the Company determines, in its reasonable business judgment, that the proposed registration or the offering would be materially detrimental to the Company and gives the Stockholders written notice of such determination. If the Company postpones the filing of any registration statement or offering and sale, the Stockholders will have the right to withdraw the request for registration by giving notice to the Company within 15 days after receipt from the Company of the notice of postponement. If the Stockholders withdraw their request for registration, such request will not be counted for purposes of determining the number of Demand Registrations to which the Stockholders are entitled under this Section 2.2.

The Stockholders may instruct the Company to withdraw any registration statement filed under this Section 2.2, and the Company will withdraw such registration statement, if prior to the effective date thereof the Stockholders learn of a material adverse change in the business, condition or prospects of the Company unknown to the Stockholders at the time the registration was requested. In addition, the Stockholders may, before or after a registration statement becomes effective, withdraw their Registrable Securities from the offering by giving notice of such withdrawal to the Company, in which event such registration will be deemed to have occurred for the purposes of this Section 2.2 unless the Stockholders, within 20 days after such withdrawal, agree in writing to pay all the out-of-pocket expenses of the Company incurred in connection with such withdrawn registration and

pay all such expenses in full within 10 days after receipt of a statement therefor setting forth the amounts of such expenses in reasonable detail.

Except in the case of a withdrawal provided for in the preceding paragraph or a registration from which 20% or more of the Registrable Securities requested to be registered are excluded by the book-running managing underwriter pursuant to Section 2.3, the Company will not be required to effect more than two Demand Registrations pursuant to this Agreement.

If within 20 days after a request for Demand Registration has been made pursuant to this Section 2.2 the Company notifies the Stockholders that the Company wishes either to include an offering of its own securities for its own account or to register securities for its own account on

the registration statement being filed pursuant to the Stockholders' demand, such additional securities will be included and the registration will not be counted in determining the number of Demand Registrations to which the Stockholders are entitled. Unless otherwise agreed in writing by the Stockholders, no security holder of the Company other than the Stockholders will be permitted to offer securities of the Company pursuant to any Demand Registration pursuant to this Section 2.2.

The Stockholders will select the book-running managing underwriter and any other investment bankers and underwriters to be used in connection with an offering pursuant to this Section 2.2, subject to the Company's approval, which approval will not unreasonably be withheld or delayed.

2.3 REDUCTION OF OFFERING. Notwithstanding anything else in this Agreement, if in the opinion of the book-running managing underwriter of an offering described in Section 2.1 or Section 2.2 (i) the size of the offering, or (ii) the combination of securities proposed to be included in such offering are such that the success of the offering would be materially and adversely affected by the inclusion of Registrable Securities, then:

(a) if the size of the offering is the basis for such underwriter's opinion, the amount of Registrable Securities to be offered for the account of the Stockholders will be reduced to the extent necessary to reduce the total amount of securities to be included in such offering to the amount recommended by such underwriter; provided, that (x) in the case of a Demand Registration, the amount of Registrable Securities to be offered by, on behalf of, or for the account of the Stockholders will be reduced only after the amount of securities to be offered for the account of the Company and any security holders, other than the Stockholders, has been reduced to zero and (y) in the case of a Piggyback Registration, where securities are being offered by or for the account of anyone other than the Company, then the proportion by which the aggregate amount of such Registrable Securities intended to be offered by or for the account of the Stockholders is reduced will not exceed the proportion by which the amount of such securities intended to be offered for the account of such other selling shareholder is reduced; and

(b) if the combination of securities to be offered is the basis for such underwriter's opinion, the Registrable Securities to be included in such offering will be reduced as described in paragraph (a) above, except that in the case of a Piggyback Registration, if the reduction described in clause (y) of paragraph (a) would, in the judgment of the book-running managing underwriter, be insufficient substantially to eliminate the adverse effect that inclusion of the Registrable Securities requested to be included would have on such offering, such Registrable Securities will be excluded from such offering.

2.4 DEFINITION OF REGISTRABLE SECURITIES. "REGISTRABLE SECURITIES" means (i) the shares of Common Stock currently issued to the Stockholders and those issuable upon conversion of the Preferred Stock and exercise of warrants to purchase Common Stock; (ii) any shares of Common Stock of the Company acquired by any Stockholder after the date hereof pursuant to a right of first refusal or pursuant to pre-emptive rights and (iii) any shares of

Common Stock acquired by any Stockholder after the date hereof pursuant to a dividend or other distribution with respect to, or in exchange for or in

replacement of, such Common Stock, Preferred Stock or Common Stock issued on conversion or exercise thereof; provided, however, that shares of Common Stock which are Registrable Securities shall cease to be Registrable Securities upon any sale pursuant to a registration statement under the 1933 Act, Section 4(1) of the 1933 Act or Rule 144 promulgated under the 1933 Act. Registrable Securities shall not include Common Stock, Preferred Stock, or any shares of Common Stock issued or issuable upon conversion thereof, which are available for sale and can be sold (whether or not so sold) pursuant to Rule 144A or Rule 144 of the 1933 Act, or any similar rule promulgated by the Commission permitting the resale of restricted securities without the necessity of a registration statement under the 1933 Act.

2.5 REGISTRATION PROCEDURES. All expenses incurred in connection with the registrations under this Article II (including all registration, filing, listing, qualification, printer's and accounting fees and up to $5,000 for legal fees of one counsel for all Stockholders but excluding underwriting commissions and discounts) shall be borne by the Company. If and whenever the Company is under an obligation pursuant to this Article II to effect or use the Company's best efforts to effect a registration of any Registrable Securities, the Company shall: (a) use the Company's best efforts to prepare and file with the Commission as soon as reasonably practicable, a registration statement with respect to the Registrable Securities and use the Company's best efforts to cause such registration to promptly become and remain effective for a period of at least one hundred twenty (120) days (or such shorter period during which the distribution described in the Registration Statement has been completed); (b) use the Company's best efforts to register and qualify the Registrable Securities covered by such registration statement under applicable state securities laws; (c) provide a transfer agent for the Common Stock no later than the effective date of the first registration of any Registrable Securities, (d) list such Registrable Securities on any national securities exchange or the NASDAQ National Market System, or if the Common Stock is unable to be so listed, use the Company's best efforts to qualify the Registrable Securities for inclusion on any other automated quotation system of the National Association of Securities Dealers, Inc.; and (e) take such other actions as are reasonable or necessary to comply with the requirements of the 1933 Act and the regulations thereunder, or the reasonable request of any holder, with respect to the registration and distribution of the Registrable Securities. The Company is not obligated to effect registration or qualification under this Article II in any jurisdiction requiring the Company to qualify to do business (unless the Company is otherwise required to be so qualified) or to execute a general consent to service of process.

2.6 UNDERWRITING ARRANGEMENT. Registration pursuant to Article II covering an underwritten public offering, shall be conditioned upon each participating holder entering into a written agreement with the managing underwriter in such form and containing such provisions as are reasonably acceptable to each such participating holder and are customary in the securities business for such an arrangement between such underwriter and companies of the Company's size and investment stature.

2.7 NOTIFICATION. The Company shall promptly notify each holder of Registrable Securities covered by any registration statement of any event, of which the Company has

knowledge, that results in the prospectus included in such registration statement, as then in effect, containing an untrue statement of a material fact or omitting to state a material fact required to be stated therein or necessary to make the statement therein not misleading in light of the circumstances then existing.

2.8 FURNISHING OF DOCUMENTS. At the request of any participating holder, the Company will furnish to each underwriter, if any, and participating holders, a legal opinion of its counsel and a "cold comfort" letter from its independent certified public accountants, each in customary form and substance, at such time or times as such documents are customarily provided in the type of offering involved. As expeditiously as possible, the Company shall furnish to each participating holder such reasonable numbers of copies of the prospectus, including a preliminary prospectus, in conformity with the requirements of the 1933 Act, and such other documents as the participating holder may reasonably request in order to facilitate the public sale or other disposition of the Registrable Securities owned by the participating holders.

2.9 INDEMNIFICATION AND CONTRIBUTION.

(a) In the event of a registration of any of the Registrable

Securities under the 1933 Act pursuant to Article II, the Company will indemnify and hold harmless the Stockholders, and each other person, if any, who controls the Stockholders within the meaning of the 1933 Act, and each employee, officer and trustee of the Stockholders, against any losses, claims, damages or liabilities, joint or several, to which the Stockholders, or each such controlling person, employee, officer or trustee may become subject under the 1933 Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in any registration statement under which such Registrable Securities were registered under the 1933 Act pursuant to Article II, any preliminary prospectus or final prospectus contained therein or any amendment or supplement thereof or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse the Stockholders, and each such controlling person, employee, officer or trustee for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided that the Company will not be liable in any such case if and to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by the Stockholders or any such controlling person, employee, officer or trustee in writing specifically for use in such registration statement or prospectus.

(b) In the event of a registration of any of the Registrable Securities under the 1933 Act pursuant to Article II, each holder of Registrable Securities included in such registration will indemnify and hold harmless the Company, each person, if any, who controls the Company within the meaning of the 1933 Act, each officer of the Company who signs the registration statement, each director of the Company, and each underwriter and person who controls any underwriter within the meaning of the 1933 Act, against all losses, claims, damages or liabilities, joint or several, to which the Company or such officer, director, underwriter or controlling person may become subject under the 1933 Act or otherwise, insofar as such losses, claims, damages or

liabilities (or actions in respect thereof) arise out of or are based upon any untrue statement or alleged untrue statement of any material fact contained in the registration statement under which such Registrable Securities were registered under the 1933 Act pursuant to Article II, any preliminary prospectus or final prospectus contained therein, or any amendment or supplement thereof, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse the Company and each such officer, director, underwriter and controlling person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action; provided that each holder of Registrable Securities will be liable hereunder in any such case if and only to the extent that any such loss, claim, damage or liability arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in reliance upon and in conformity with information pertaining to such Stockholder, as such, furnished in writing to the Company by such Stockholder specifically for use in such registration statement or prospectus.

(c) Promptly after receipt by an indemnified party hereunder of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party hereunder, notify the indemnifying party in writing thereof, but the omission so to notify the indemnifying party shall not relieve the indemnifying party from any liability which the indemnifying party may have to such indemnified party other than under this Section 2.9 and shall only relieve the indemnifying party from any liability which the indemnifying party may have to such indemnified party under this Section 2.9 if and to the extent the indemnifying party is prejudiced by such omission. In case any such action shall be brought against any indemnified party and the indemnified party shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in and, to the extent the indemnifying party shall wish, to assume and undertake the defense thereof with counsel satisfactory to such indemnified party, and, after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume and undertake the defense thereof, the indemnifying party shall not be liable to such indemnified party under this Section 2.9 for any legal expenses subsequently incurred by such indemnified party in

connection with the defense thereof other than reasonable costs of investigation and of liaison with counsel so selected; provided that, if the defendants in any such action include both the indemnified party and the indemnifying party and the indemnified party shall have reasonably concluded that if the interests of the indemnified party reasonably may be deemed to conflict with the interests of the indemnifying party, then the indemnified party shall have the right to select a separate counsel and to assume such legal defenses and otherwise to participate in the defense of such action, with the expenses and fees of such separate counsel and other expenses related to such participation to be reimbursed by the indemnifying party as incurred.

(d) In order to provide for just and equitable contribution to joint liability under the 1933 Act in any case in which either: (i) any holder of Registrable Securities exercising rights under this Agreement, or any controlling person of any such holder, makes a claim for indemnification pursuant to this Section 2.9 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case

notwithstanding the fact that this Section 2.9 provides for indemnification in such case, or (ii) contribution under the 1933 Act may be required on the part of any such holder or any such controlling person in circumstances for which indemnification is provided under this Section 2.9; then, and in each such case, the Company and such holder will contribute to the aggregate losses, claims, damages or liabilities to which they may be subject (after contribution from others) as is appropriate to reflect the relative fault of the Company and such holder in connection with the statements or omissions which resulted in such losses, claims, damages or liabilities, as well as the relative benefit received by the Company and such holder as a result of the offering in question; provided, that in any such case (A) no such holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered by such holder pursuant to such registration statement, and (B) no person or entity guilty of fraudulent misrepresentation (within the meaning Section 11 (f) of the 1933 Act) will be entitled to contribution from any person or entity who was not guilty of such fraudulent misrepresentation.

2.10 CHANGES IN COMMON STOCK. If, and as often as, there is any change in the Common Stock by way of a stock split, stock dividend, combination or reclassification, or through a merger, consolidation, reorganization or recapitalization, or by any other means, then appropriate adjustment shall be made in the provisions hereof so that the rights and privileges granted hereby shall continue with respect to the Common Stock as so changed.

2.11 PREPARATION OF REGISTRATION STATEMENT. Whenever the Company is registering any Common Stock under the 1933 Act and a holder of Registrable Securities is selling any Registrable Securities under such registration or determines that it may be a controlling person under such 1933 Act, the Company will allow such holder and its counsel to participate in the preparation of the registration statement, will include in the registration statement such information as such holder may reasonably request and will take all such other action as such holder may reasonably request.

2.12 TRANSFERABILITY OF REGISTRATION RIGHTS. The registration rights described herein are freely transferable by the holders of Registrable Securities to any person to whom such holder transfers Registrable Securities.

ARTICLE III

PRE-EMPTIVE RIGHTS

3.1 PROCEDURES FOR EXERCISE OF PRE-EMPTIVE RIGHT TO PURCHASE ADDITIONAL SECURITIES. If at any time prior to the closing of an initial public offering by the Company, the Company intends to sell in excess of $500,000 of its equity securities (in the same or a series of related offerings) or securities convertible into equity securities, which $500,000 threshold shall be determined by taking into account the maximum amount that is to be paid or payable for the issuance, and upon the exercise, conversion or exchange of any such equity securities or securities convertible into equity securities ("APPLICABLE OFFERINGS"), except for Excluded Offerings (as hereinafter defined), the Company will, at least fifteen (15) days prior to the sale of any securities pursuant to an Applicable Offering, notify the Stockholders who own Preferred Stock (for purposes of this Section 3.1, each a "HOLDER") of the Applicable Offering, including

the terms thereof and the number of securities offered thereby. Within fifteen (15) days after delivery of such notice by the Company, each Holder shall have the right to transmit a binding commitment (a "BINDING COMMITMENT") to purchase (on the exact same terms as offered pursuant to the Applicable Offering) and, in the event that the Company proceeds with the Applicable Offering, it will be obligated to sell to each such Holder, that number of securities to be sold in the Applicable Offering proportionally equal to each such Holder's equity interest in the Company (determined on an as-if-converted to Common Stock basis, assuming the exercise of all warrants and other rights to acquire capital stock of the Company, but excluding any outstanding options issued under any stock or option plan approved by the Company's Board of Directors). Failure by a Holder to transmit a Binding Commitment pursuant to this Section 3.1, shall be deemed a waiver in full of such Holder's rights to purchase any of the securities to be sold in connection with such Applicable Offering.

3.2 EXCLUDED OFFERINGS. Notwithstanding the provisions of Section 3.1, the following issuances by the Company shall be "EXCLUDED OFFERINGS" and shall not be considered Applicable Offerings: (i) securities issued in any public offering, (ii) securities issued in connection with any acquisition by the Company of any other business or commercial enterprise where the Company is the surviving entity, (iii) securities issued for compensatory purposes to directors, consultants or employees of the Company or its affiliates, (iv) securities issued upon exercise of stock options or warrants or upon the conversion of convertible securities outstanding on the date hereof or issued in compliance with this Article III (including shares of Common Stock issuable upon conversion of the Preferred Stock), (v) securities issued to financial institutions and leasing companies in connection with borrowing and lease financing arrangements, or to landlords or service providers, (vi) securities issued pursuant to (a) the provisions of Section 3 of the Series 04 Preferred Stock Purchase Agreement by and between the Company and the investors who are signatories thereto, dated April 2, 2004, as may be amended from time to time, (b) the provisions of Section 3 of the Series 04 Preferred Stock Exchange Agreement by and between the Company and the investors who are signatories thereto, dated April 2, 2004, as may be amended from time to time, (c) the provisions of Section 3 of the 2005 Series 04 Preferred Stock Purchase Agreement by and between the Company and the investors who are signatories thereto, dated March 2, 2005, as may be amended from time to time, (d) the provisions of Section 3 of the Purchase Agreement, and (e) such comparable exchange rights as may granted by the Company in the future, (vii) securities issued in connection with any joint venture, strategic alliance, distribution or development agreement or other similar relationship or issued for non monetary consideration, (viii) securities issued pursuant to Section 3.9 of Article FOURTH of the Company's Amended and Restated Certificate of Incorporation, as may be amended from time to time or (ix) securities issued upon the exercise or conversion of securities issued pursuant to (i)-(viii) or upon the exercise or conversion of those securities.

ARTICLE IV

VOTING AGREEMENT

4.1 VOTING AGREEMENT. At any and all meetings (including any written action in lieu of a meeting) of stockholders of the Company at which directors are to be elected, each

Stockholder shall vote all of the voting securities of the Company now or hereafter owned or controlled by such Stockholder to elect, as a director of the Company, one representative (the "VERTICAL REPRESENTATIVE") designated by the general partner of Vertical Fund I, L.P. and Vertical Fund II, L.P., presently The Vertical Group, L.P. (the "VERTICAL GP").

4.2 DESIGNATION OF DIRECTOR. The initial Vertical Representative shall be Jack Lasersohn.

4.3 SUCCESSOR DIRECTORS. If the Vertical Representative shall cease to serve as a director of the Company for any reason, the Vertical GP shall have the right to designate a successor representative and each Stockholder shall promptly vote all of his voting securities of the Company and otherwise use his best efforts to ensure that such successor representative is duly elected as a director.

4.4 NOMINATION BY COMPANY. The Company shall use its best efforts to

nominate for election to the Board of Directors the Vertical Representative designated hereunder.

ARTICLE V

IPO LOCK-UP

Each Stockholder agrees that in connection with an underwritten initial public offering of Common Stock, upon the request of the Company or the principal underwriter managing such public offering, the Stock may not be sold, offered for sale or otherwise disposed of without the prior written consent of the Company or such underwriter, as the case may be, for at least 214 days after the effectiveness of the Registration Statement filed in connection with such offering, or such longer period of time as the Board of Directors may determine, provided that all of the Company's directors and officers agree to be similarly bound.

ARTICLE VI

MISCELLANEOUS

6.1 TERM OF AGREEMENT.

This Agreement shall terminate with respect to (i) Section 1.3 when the Company becomes subject to the periodic reporting requirements of Section 13 or Section 15(d) of the Exchange Act, (ii) Article II when there are no longer any Registrable Securities, (iii) Article III upon completion of the Company's initial public offering and (iv) Article (IV) upon completion of the Company's initial public offering or at such time as Vertical and its affiliates no longer hold an aggregate of 7% of the Company's Common Stock, on a fully diluted (assuming that all warrants, options and other rights to acquire capital stock of the Company had been exercised), as converted basis. Notwithstanding the foregoing, this Agreement shall terminate in full upon the sale of the Company, whether by merger, sale, or transfer of more than fifty percent (50%) of its outstanding capital stock, or sale of substantially all of its assets.

6.2 ENTIRE AGREEMENT. This Agreement constitutes the entire agreement among the parties with respect to the subject matter hereof, and supersedes all prior agreements and understandings among the parties with respect thereto. This agreement is intended to amend and restate the Fourth Amended Stockholders' Agreement in its entirety and upon execution hereof, the Fourth Amended Stockholders' Agreement shall be deemed to be terminated in all respects.

6.3 SUCCESSORS AND ASSIGNS. This Agreement and the rights and obligations of the parties hereunder shall inure to the benefit of, and be binding upon their respective successors, assigns and legal representatives.

6.4 MODIFICATION, WAIVER OR AMENDMENT. Except for the addition of Additional Stockholders as provided in Section 6.5 hereby, neither this Agreement nor any provision hereof can be modified, waived, amended, changed, discharged or terminated except by an instrument in writing, signed by the Company and each of Edward M. Giles, State Farm Mutual Automobile Insurance Company, Vertical Fund I, L.P. and Vertical Fund II, L.P.; provided that the agreement of any such Stockholder shall not be required if such Stockholder (together with its affiliates) no longer holds at least fifty percent (50%) of the Registrable Securities of the Company held by such Stockholder (together with its affiliates) as of the date hereof. If at any time Edward M. Giles, State Farm Mutual Automobile Insurance Company, Vertical Fund I, L.P. and Vertical Fund II, L.P (together with their respective affiliates) shall each no longer hold at least fifty percent (50%) of the Registrable Securities held by each such Stockholder (together with their respective affiliates) as of the date hereof, this Agreement and any provision hereof may only be waived, modified, amended or terminated by a written agreement signed by the Company and the Stockholders owning at least a majority of the Registrable Securities then subject to this Agreement, based upon voting power and calculated on an "as if converted" basis.

6.5 ADDITIONAL PARTIES. Notwithstanding anything to the contrary herein, additional persons who are officers or employees of the Company or persons or entities who acquire shares of Common Stock of the Company or securities of the Company convertible into Common Stock, may become parties to this Agreement and become "Stockholders" hereunder by executing an Additional Party Signature Page with the Company.

6.6 GOVERNING LAW. This Agreement shall be governed by and construed

under the laws of the Commonwealth of Massachusetts without regard to the conflicts of law provisions thereof.

6.7 NOTICES. Unless otherwise provided, any notice required or permitted under this Agreement shall be given in writing and shall be deemed effectively given upon personal delivery to the party to be notified by hand or professional courier service or facsimile (with written confirmation) to the address or facsimile number for such party noted on the signature page hereof, or at such other address as such party may designate by ten (10) days' advance written notice to the other parties.

6.8 ADDITIONAL LEGEND. Each certificate evidencing voting securities of the Company held by a Stockholder shall bear a legend substantially as follows:

"The shares represented by this certificate are subject to the terms and conditions of a certain Fifth Amended and Restated Stockholders' Agreement dated as of January 19, 2006, as may be amended and/or restated from time to time, a copy of which the Company will furnish to the holder of this certificate upon request and without charge."

6.9 SEVERABILITY. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision were so excluded and the remaining provisions of the Agreement shall be enforceable in accordance with their terms.

6.10 REMEDIES. In case any one or more of the covenants and/or agreements set forth in this Agreement shall have been breached by any party hereto, the party or parties entitled to the benefit of such covenants or agreements may proceed to protect and enforce their rights either by suit in equity and/or by action at law, including, but not limited to, an action for damages as a result of any such breach and/or an action for specific performance of any such covenant or agreement contained in this Agreement. The rights, powers and remedies of the parties under this Agreement are cumulative and not exclusive of any other right, power or remedy which such parties may have under any other agreement or law. No single or partial assertion or exercise of any right, power or remedy of a party hereunder shall preclude any other or further assertion or exercise thereof.

6.11 CAPTIONS. The table of contents, headings and captions used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

6.12 PRONOUNS. All terms and words used in this Agreement shall be deemed and construed to include any other number, singular or plural, and any other gender, masculine, feminine or neuter, as the context or sense of this Agreement or any paragraph or clause herein may require, the same as if such words have been fully and properly written in the required number and gender.

6.13 COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

6.14 DISPUTE RESOLUTION. Any controversy or claim arising out of or relating to this contract, or the breach thereof, shall be settled by arbitration in Boston, Massachusetts administered by the American Arbitration Association in accordance with its Commercial Arbitration Rules, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

METABOLIX INC.

By: /s/ James Barber

Name: James Barber
Title: Chief Executive Officer

and President

STOCKHOLDERS

/s/ Edward M. Giles

Edward M. Giles

STATE FARM MUTUAL AUTOMOBILE
INSURANCE CO.

By:/s/ John Concklin

Name: John Concklin
Title: Vice President-Common
Stock

VERTICAL FUND II, L.P.

By:The Vertical Group, L.P.
Its General Partner

By:/s/ Stephen D. Baksa

Name: Stephen D. Baksa
Title: General Partner

VERTICAL FUND I, L.P.

By: The Vertical Group, L.P.
Its General Partner

By:/s/ Stephen D. Baksa

Name: Stephen D. Baksa
Title: General Partner

EXHIBIT A

STOCKHOLDERS

Winifred E. Alcorn
AHI/MBX Associates, LLC
Thomas G. Auchincloss, Jr.
Banc of America Securities, LLC Custodian For Benefit of Philip Meyer IRA
Rollover
James J. Barber
Rex J. Bates
Allan M. Benton
Henry E. Blair
Christopher M. Bodnar
Richard Booth
Brookstone Biotech Ventures, L.P.
Ray O. Brownlie
Brownlie Family Partnership
Joel & Joyce Buchman, as Joint Tenants with Rights of Survivorship
Andrew H. Chapman
Chestnut Capital, LLC
F. Hudnall Christopher, Jr.
Jeffrey Cianci
Roger L. Clifton
Cynthia A. Cannell Revocable Trust Dated 8/15/96
Corporate Finance Group, Inc.
Dongah Flour Mills Co., Ltd.
John Duffey
Fernanda Eberstadt
Frederick Eberstadt
Nicholas Nash Eberstadt
Joni Evans
Fiduciary Trust Company as Custodian FBO Edward M. Giles IRA #3
Steven R. Frank
Alexander J. Giacco
Edward M. Giles
Grant Gray
Elizabeth M. Greetham
John D. Hogan
Won Huh
Isles Capital, L.P.
James C. Cannell Revocable Trust Dated 8/15/96

John D. Hogan IRA
Maniv Investments, LLC
William D. and Carol F. McDonald
George McNally

Davis U. Merwin
James M. Meyer
Philip K. Meyer
Mintz Levin Investments LLC
Michael T. Cannell Revocable Trust Dated 8/15/96
Peter F. Cannell Revocable Trust Article Third
Edward M. Muller
William L. Musser, Jr.
David and Sharon Neenan
Patrick R. D. Paul
Oliver P. Peoples
F.W. Rapp
Joseph P. Riccardo
Ridfell Investment S.A.
Rosetta N. Reusch and William H. Reusch JTWROS
Melvin J. Sallen
SIA Partnership XX
Anthony J. Sinskey
State Farm Mutual Automobile Insurance Co.
Gregory Stephanopoulos
Charles Stone
The 2000 Charles F. Stone III Living Trust DTD October 23, 2000
Pike Sullivan
The Devivo Revocable Trust dated 11-1-88
The Gwyneth Muller Irrevocable Trust - 2000, dated March 27, 2000, William Gillen, Trustee
The Lara Muller Irrevocable Trust - 2000, dated March 27, 2000, William Gillen, Trustee
The Paul Foundation
Vertical Fund I, L.P.
Vertical Fund II, L.P.
Charles Waggner
James B. Wallace
Wallace Family Partnership
Charles-Henri Weil
Joseph and Deborah Werner, as Joint Tenants with rights of Survivorship
James Wilbur
William B. Cannell Revocable Trust Dated 8/15/96
Williams Children's Trust dated May 22, 1996, Douglas R. Ederle, Trustee
Simon F. Williams
George F. Wood
Zillion Worldwide Inc.

EXHIBIT B

METABOLIX, INC.

Fifth Amended and Restated Stockholders' Agreement

ADDITIONAL STOCKHOLDER SIGNATURE PAGE

By executing this signature page in the space provided, the undersigned "Stockholder" hereby agrees to become party to and to be bound by all of the terms and conditions of the Fifth Amended and Restated Stockholders' Agreement by and among Metabolix, Inc. and the parties named therein and authorizes this signature page to be attached as a counterpart to such agreement. This Additional Stockholder Signature Page shall take effect and shall become an integral part of the Fifth Amended and Restated Stockholders' Agreement immediately upon acceptance hereof by the Company

EXECUTED this day of , .

(print name)

By:

Title:

Address:

Fax:

Accepted:

METABOLIX, INC.

By:
- ---
Name:
Title:

EXHIBIT 10.19

WHENEVER CONFIDENTIAL INFORMATION IS OMITTED HEREIN (SUCH OMISSIONS ARE DENOTED BY AN ASTERISK*), SUCH CONFIDENTIAL INFORMATION HAS BEEN SUBMITTED SEPARATELY TO THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT.

LICENSE AGREEMENT

This Agreement is made and entered into this 1st day of October, 1999, (the "Effective Date") by and between METABOLIX, Inc. a corporation duly organized and existing under the laws of the State of Delaware and having its principal office at 303 Third Street, Cambridge, Massachusetts 02142 (hereinafter referred to as "METABOLIX"), and TEPHA, Inc., a corporation duly organized under the laws of the State of Delaware and having its principal office at 303 Third Street, Cambridge, Massachusetts 02142 (hereinafter referred to as "TEPHA").

WITNESSETH

WHEREAS, METABOLIX, is the owner of the METABOLIX PATENT RIGHTS (as later defined herein), and related technology, and has the right to grant licenses under said METABOLIX PATENT RIGHTS;

WHEREAS, METABOLIX is the licensee from the Massachusetts Institute of Technology (hereinafter referred to as "MIT") of the MIT PATENT RIGHTS (as later defined herein), and has the right to grant sublicenses under said MIT PATENT RIGHTS;

WHEREAS, METABOLIX desires to have the PATENT RIGHTS commercialized in the FIELD OF USE, and is willing to grant a license thereunder; and

WHEREAS, LICENSEE desires to obtain a license under the PATENT RIGHTS upon the terms and conditions hereinafter set forth.

NOW THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree as follows:

* CONFIDENTIAL TREATMENT REQUESTED

1. DEFINITIONS

For the purposes of this Agreement, the following words and phrases shall have the following meanings:

1.1. "TEPHA" and "METABOLIX" shall include "AFFILIATES" defined as a related company of TEPHA or METABOLIX, respectively, the voting stock of which is directly or indirectly at least fifty percent (50%) owned and controlled by TEPHA or METABOLIX, respectively, an organization which directly or indirectly controls more than fifty percent (50%) of the voting stock of TEPHA or METABOLIX, respectively, and an organization the majority ownership of which is directly or indirectly common to the ownership of TEPHA or METABOLIX, respectively.

1.2. "PATENT RIGHTS" shall mean all of the following METABOLIX and MIT intellectual property, respectively, the "METABOLIX PATENT RIGHTS" and the MIT PATENT RIGHTS":

1.2.1. the United States patents listed in Appendix A;

1.2.2. the United States patent applications listed in Appendix A and United States patent applications filed after the EFFECTIVE DATE on IMPROVEMENTS, and divisionals, continuations and claims of continuation-in-part applications which shall be directed to subject matter specifically described in such patent applications, and the resulting patents;

1.2.3. any patents resulting from reissues or reexaminations of the United States patents described in 1.2.1 and 1.2.2 above;

1.2.4. the Foreign patents listed in Appendix A;

1.2.5. the Foreign patent applications listed in Appendix A, and divisionals, continuations and claims of continuation-in-part applications which shall be

directed to subject matter specifically described in such Foreign patent applications, and the resulting patents;

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1.2.6. Foreign patent applications filed after the EFFECTIVE DATE on any patent application in 1.2.2 and divisionals, continuations and claims of continuation-in-part applications which shall be directed to subject matter specifically described in such patent applications, and the resulting patents; and

1.2.7. any Foreign patents, resulting from equivalent Foreign procedures to United States reissues and reexaminations, of the Foreign patents described in 1.2.4, 1.2.5 and 1.2.6 above.

1.3. A "LICENSED PRODUCT" shall mean any product or part thereof which:

1.3.1. is covered in whole or in part by an issued, unexpired valid claim or a pending claim contained in the PATENT RIGHTS in the country in which any such product or part thereof is made, used or sold; or

1.3.2. is manufactured by using a process or is employed to practice a process which is covered in whole or in part by an issued, unexpired valid claim or a pending claim contained in the PATENT RIGHTS in the country in which a LICENSED PROCESS is used or in which such product or part thereof is used or sold.

1.4. A "LICENSED PROCESS" shall mean any process which:

1.4.1. is covered in whole or in part by an issued, unexpired valid claim or a pending claim contained in the PATENT RIGHTS in the country in which such process is used or in which the LICENSED PRODUCT made thereby is used or sold.

1.5. "NET SALES" shall mean TEPHA's and its sublicensees' billings for LICENSED PRODUCTS and LICENSED PROCESSES produced hereunder less the sum of the following:

1.5.1. discounts allowed in amounts customary in the trade;

1.5.2. sales, tariff duties and/or use taxes directly imposed and with reference to particular sales;

1.5.3. outbound transportation prepaid or allowed; and

1.5.4. amounts allowed or credited on returns.

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No deduction shall be made for commissions paid to individuals whether they be with independent sales agencies or regularly employed by TEPHA and on its payroll, or for cost of collections. LICENSED PRODUCTS shall be considered "sold" when invoiced. "NET SALES" shall not include LICENSED PRODUCTS sold for clinical testing, research or development purposes. If a LICENSED PRODUCT or LICENSED PROCESS shall be distributed or invoiced for a discounted price substantially lower than customary in the trade or distributed at no cost to AFFILIATES of TEPHA or otherwise, NET SALES shall be based on the customary amount billed for such LICENSED PRODUCTS or LICENSED PROCESSES.

Where the LICENSED PRODUCT is a combination product consisting of polymer whose composition or manufacture is covered by the PATENT RIGHTS plus other materials (such as a growth factor, but not, for example, filler materials) that are not covered by the PATENT RIGHTS, then "NET SALES" shall mean the NET SALES of the full product multiplied by the fully loaded manufacturing cost of the polymer divided by the total fully loaded manufacturing cost of the total combination material. When the LICENSED PRODUCT consists of a

combination product consisting of a component made from the polymer, plus other components, then "NET SALES" shall mean NET SALES of the total product multiplied by the fully loaded manufacturing cost of the polymer component divided by the fully loaded manufacturing cost of the total product. By "fully loaded" is meant the cost of goods sold plus overhead allocated to production and sale thereof.

1.6. "FIELD OF USE" shall mean IN VIVO human and veterinary medical use of polymers falling within the PATENT RIGHTS, including, without limitation, tissue engineering, implantables, medical devices, drug delivery and contrast agents, but excluding medical disposables, surgical drapes and trays, nutritional and all other diagnostic uses. and excluding transgenic plant crop production of polymers. "IMPROVEMENT" shall mean an invention conceived and/or reduced to practice during the two-year period after the EFFECTIVE DATE and dominated by the claims of the PATENT RIGHTS listed on Appendix A and owned or CONTROLLED by METABOLIX or TEPHA (excluding any preexisting IMPROVEMENT owned or CONTROLLED by any entity as of the

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date it becomes a successor or permitted assignee of METABOLIX or TEPHA under Article 11).

1.7. "KNOW-HOW" shall mean technical, manufacturing, regulatory and other information, methods, specifications, samples, processes, procedures, formulations, test data, protocols, and trade secrets owned or CONTROLLED by METABOLIX or TEPHA during the two-year period after the EFFECTIVE DATE and relating to the PATENT RIGHTS or to the development, manufacture or use of any LICENSED PRODUCTS or LICENSED PROCESSES (excluding any preexisting KNOW-HOW owned or CONTROLLED by any entity as of the date it becomes a successor or permitted assignee of METABOLIX or TEPHA under Article 11).

1.8. "CONTROL" shall mean with respect to any IMPROVEMENTS or KNOW-HOW, the possession of the ability to grant a license or sublicense with respect thereto as provided for herein.

1.9. "FDA" shall mean the United States Food and Drug Administration or any successor agency thereof.

2. GRANT

2.1. Subject to the terms and conditions of this Agreement, METABOLIX hereby grants to TEPHA the worldwide right and license in the FIELD OF USE to make, have made, use, lease, sell, offer for sale and import the LICENSED PRODUCTS and to practice the LICENSED PROCESSES until the expiration of the last to expire of the PATENT RIGHTS, unless this Agreement shall be sooner terminated according to the terms hereof.

2.2 Under the terms of its license with MIT, METABOLIX has agreed that any sublicenses granted by it shall provide that the obligations to MIT of articles 2, 5, 7, 8, 9, 10, 12, 13 and 15 of its license with MIT shall be binding upon the sublicensee as if it were a party to that license agreement. METABOLIX further has agreed to attach copies of these articles to sublicense agreements, and a copy thereof is attached hereto as Appendix C. To the extent of any conflict between

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the terms of this Agreement and Appendix C, as to the MIT PATENT RIGHTS only, the terms of Appendix C shall prevail.

2.3 In order to establish a period of exclusivity for TEPHA, METABOLIX hereby agrees that it shall not grant any other license to make, have made, use, lease, sell, offer for sale or import LICENSED PRODUCTS or to utilize LICENSED PROCESSES in the FIELD OF USE and shall not practice under the PATENT RIGHTS for its own purposes in the FIELD OF USE during the term of this Agreement; provided, however, MIT has reserved the right to practice under the MIT PATENT RIGHTS for its own noncommercial research

purposes.

2.4 Within six (6) months after the EFFECTIVE DATE, METABOLIX shall disclose to TEPHA in writing all METABOLIX-CONTROLLED KNOW-HOW not previously disclosed. During the two-year period after the EFFECTIVE DATE, each party shall also promptly disclose to the other in writing on an ongoing basis all additional KNOW-HOW and IMPROVEMENTS. Subject to Article 13 (Confidentiality), METABOLIX grants TEPHA the exclusive right and license to use METABOLIX KNOW-HOW and METABOLIX IMPROVEMENTS in connection with its license hereunder to the PATENT RIGHTS in the FIELD OF USE until termination or expiration of this Agreement; provided, however, after expiration of this Agreement, TEPHA shall retain a perpetual, royalty-free, non-exclusive license to the METABOLIX KNOW-HOW. Subject to Article 13 (Confidentiality) and mutually agreed upon royalty and other terms, TEPHA grants METABOLIX the exclusive right and license to use TEPHA KNOW-HOW and TEPHA IMPROVEMENTS in connection with the PATENT RIGHTS outside the FIELD OF USE until the last to expire of any patent rights covering the TEPHA IMPROVEMENTS; provided, however, after expiration of this Agreement, METABOLIX shall retain a perpetual, royalty-free, non-exclusive license to the METABOLIX KNOW-HOW.

2.5 TEPHA shall have the right to enter into sublicensing agreements for the rights, privileges and licenses granted hereunder. Upon any termination of this

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Agreement, sublicensees' rights shall also terminate, subject to Paragraph 14.6 hereof.

2.6 TEPHA agrees to incorporate terms and conditions substantively similar to Articles 1, 2, 5, 7.1, 8, 9, 10, 11, 12, 13, 14.5, 14.6, and 16 of this Agreement into its sublicense agreements, that are sufficient to enable TEPHA to comply with this Agreement.

2.7 TEPHA agrees to forward to METABOLIX a copy of any and all sublicense agreements promptly upon execution by the parties.

2.8 TEPHA shall not receive from sublicensees anything of value in lieu of cash payments in consideration for any sublicense under this Agreement, without the express prior written permission of METABOLIX.

2.9 Nothing in this Agreement shall be construed to confer any rights upon TEPHA by implication, estoppel or otherwise as to any technology or patent rights of METABOLIX, MIT or any other entity other than the PATENT RIGHTS, regardless of whether such patent rights shall be dominant or subordinate to any PATENT RIGHTS.

3. DUE DILIGENCE

3.1. TEPHA shall use diligent efforts to bring one or more LICENSED PRODUCTS or LICENSED PROCESSES to market through a thorough, vigorous and diligent program for exploitation of the PATENT RIGHTS and shall continue active, diligent development and marketing efforts for one or more LICENSED PRODUCTS or LICENSED PROCESSES throughout the term of this Agreement.

3.2. In addition:

3.2.1. TEPHA shall raise in connection with the PATENT RIGHTS and allocated for expenditure for efforts under Paragraphs 3.1 and 3.2, a cumulative total of investment capital and/or research and development funds of: * from the Effective Date. Such cumulative investment capital and/or research and development funds shall include funds invested or

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expended by a joint venture in which TEPHA owns at least a thirty-three percent (33%) interest provided

that such funds are used substantially for the development and marketing of LICENSED PRODUCTS and LICENSED PROCESSES.

3.2.2. TEPHA shall use commercially reasonable efforts to promptly and diligently generate data and perform tests and studies sufficient to file, and shall file, an application for approval by the FDA of a first LICENSED PRODUCT *.

3.2.3. TEPHA shall obtain FDA approval of such first LICENSED PRODUCT *.

3.2.4. TEPHA shall keep METABOLIX informed of progress in its efforts to develop and commercialize LICENSED PRODUCTS and PROCESSES. METABOLIX shall have the right to contact a representative of TEPHA periodically by telephone to discuss TEPHA's progress with the development of LICENSED PRODUCTS and PROCESSES and sales of such LICENSED PRODUCTS and PROCESSES once launched. In addition, on or before March 1 of each year after the EFFECTIVE DATE until the first commercial sale of a LICENSED PRODUCT, TEPHA shall make a written annual summary report to METABOLIX covering the preceding year ending December 31, regarding the progress toward commercial use of LICENSED PRODUCTS and PROCESSES. All information disclosed by TEPHA to METABOLOX under this provision shall be deemed the Confidential Information (as further discussed in Paragraph 13.1) of TEPHA.

3.3. TEPHA's failure to perform in accordance with Paragraphs 3.1 and 3.2 above shall be grounds for METABOLIX to terminate this Agreement pursuant to Paragraph 14.3 hereof; provided, however, as to Paragraphs 3.2.2 and 3.2.3, if during the cure period provided in Paragraph 14.3, TEPHA shall demonstrate to the reasonable satisfaction of METABOLIX that TEPHA shall have expended good faith and diligent efforts using reasonable resources to meet the milestone(s)

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and that circumstances beyond TEPHA'S control precluded TEPHA from performing in accordance with Paragraph 3.2.2 or 3.2.3, then the time for performance of such milestone(s) shall be extended for an additional period of six (6) months, or such other period as may be mutually agreed.

4. ROYALTIES

4.1. For the rights, privileges and license granted hereunder, TEPHA shall pay royalties to METABOLIX in the manner hereinafter provided until the expiration of the last to expire of the PATENT RIGHTS or until this Agreement shall earlier be terminated:

4.1.1. A License Issue Fee of * which said License Issue Fee shall be deemed earned and due in three parts: * in investment capital and/or research and development funds in connection with the PATENT RIGHTS; * due upon the raising by TEPHA of * (cumulatively) in investment capital and/or research and development funds in connection with the PATENT RIGHTS; and * due upon the raising by TEPHA of * (cumulatively) in investment capital and/or research and development funds in connection with the PATENT RIGHTS; provided, however, the full amount of the License Issue Fee shall be due on the third anniversary of the Effective Date, whether or not TEPHA shall have raised such investment capital and/or research and development funds.

4.1.2. Milestone payments as follows: * due on filing for approval of the first LICENSED PRODUCT; and * due on FDA approval of the first LICENSED PRODUCT.

4.1.3. License Maintenance Fees of * per year payable on January 1, 2003 and on each subsequent January 1 during the term of this Agreement; provided, however, License *.

4.1.4. Running Royalties of * of NET SALES of LICENSED PRODUCTS and LICENSED PROCESSES by TEPHA and its sublicensees.

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4.1.5. A * share of gross sublicensing revenue (including sublicense issue fees, milestone payments, license maintenance fees and similar consideration but excluding sublicensing revenue from NET SALES covered in Paragraph 4.1.4 above) received by LICENSEE.

4.2. All payments due hereunder shall be paid in full, without deduction of taxes or other fees which may be imposed by any government, except as otherwise provided in Paragraph 1.5.2.

4.3. No multiple royalties shall be payable because any LICENSED PRODUCT, its manufacture, use, lease or sale are or shall be covered by more than one PATENT RIGHTS patent application or PATENT RIGHTS patent licensed under this Agreement.

4.4. Royalty payments shall be paid in the United States dollars in Cambridge, Massachusetts, or at such other place as METABOLIX may reasonably designate consistent with the laws and regulations controlling in any foreign country. If any current conversion shall be required in connection with the payment of royalties hereunder, such conversion shall be made by using the exchange rate prevailing at the Chase Manhattan Bank (N.A.) on the last business day of the calendar quarterly reporting period to which such royalty payments relate.

4.5. To the extent that TEPHA shall obtain subsequent to the EFFECTIVE DATE licenses to third party patents or other intellectual property that are necessary to manufacture or sell LICENSED PRODUCTS or LICENSED PROCESSES in the FIELD OF USE, TEPHA may deduct from the Running Royalty due to METABOLIX under Paragraph 4.1.4, * of the Running Royalties due on such third party patents or intellectual property up to an amount equal to * of the Running Royalties due hereunder.

5. REPORTS AND RECORDS

5.1. TEPHA shall keep full, true and accurate books of account containing all particulars that may be necessary for the purpose of showing the amounts payable

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to METABOLIX hereunder. Said books of account shall be kept at TEPHA's principal place of business or the principal place of business of the appropriate division of TEPHA to which this Agreement relates. Said books and the supporting data shall be open at all reasonable times for * following the end of the calendar year to which they pertain, to the inspection of METABOLIX or its agents for the purpose of verifying TEPHA's royalty statement or compliance in other respect with this Agreement. Should such inspection lead to the discovery of a greater than * discrepancy in reporting to METABOLIX' detriment, TEPHA agrees to pay the full cost of such inspection.

5.2. TEPHA shall deliver to METABOLIX true and accurate reports, giving such particulars of the business conducted by TEPHA and its sublicensees under this Agreement as shall be pertinent to diligence under Article 3 and royalty accounting hereunder: before the first commercial sale of a LICENSED PRODUCT or LICENSED PROCESS, annually, on January 31 of each year; and after the first commercial sale of a LICENSED PRODUCT or LICENSED PROCESS, quarterly, within sixty (60) days after March 31, June 30, September 30 and December 31, of each year. These reports shall include at least the following:

5.2.1. number and total billings of LICENSED PRODUCTS falling solely within the METABOLIX PATENT RIGHTS manufactured, used or sold by TEPHA and its sublicensees;

5.2.2. number and total billings for LICENSED PRODUCTS falling solely within the MIT PATENT RIGHTS manufactured, used or sold by TEPHA and its sublicensees;

5.2.3. number and total billings for LICENSED PRODUCTS falling within both the METABOLIX PATENT RIGHTS and the MIT PATENT RIGHTS manufactured, used or sold by TEPHA and its sublicensees;

5.2.4. accounting for all LICENSED PROCESSES used or sold by TEPHA and its sublicensees, along with a verification as to each LICENSED PROCESS stating whether it shall fall solely within the METABOLIX

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PATENT RIGHTS, solely within the MIT PATENT RIGHTS or both within the METABOLIX PATENT RIGHTS and the MIT PATENTS RIGHTS.;

5.2.5. deductions applicable as provided in Paragraph 1.5;

5.2.6. Running Royalties due under Paragraph 4.1.4.;

5.2.7. royalties due on payments from sublicensees under paragraph 4.1.5.;

5.2.8. total royalties due; and

5.2.9. names and addresses of all sublicensees of TEPHA. TEPHA shall endeavor to obtain similar information from its sublicensees and shall provide such information which is obtained to METABOLIX.

5.3. With each such report submitted, TEPHA shall pay to METABOLIX the royalties due and payable under this Agreement. If no royalties shall be due, TEPHA shall so report.

5.4. On or before the ninetieth (90th) day following the close of TEPHA's fiscal year, TEPHA shall provide METABOLIX with TEPHA's certified financial statements for the preceding fiscal year including, at a minimum, a balance sheet and an operating statement.

5.5. The amounts due under Articles 4 and 6 shall, if overdue, bear interest until payment a per annum rate * in effect at the Chase Manhattan Bank (N.A.) on the due date. The payment of such interest shall not foreclose METABOLIX from exercising any other rights it may have as a consequence of the lateness of any payment.

6. PATENT PROSECUTION

6.1. Throughout the term of this Agreement, TEPHA, at its own expense, shall file, prosecute and maintain those METABOLIX PATENT RIGHTS listed on Appendix B in METABOLIX' name; provided, however, METABOLIX shall be entitled to review and comment upon in a timely manner all actions undertaken in the prosecution of all patents and applications. TEPHA agrees to seek strong,

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broad claims in the best interest of METABOLIX and shall not abandon the subject matter of any substantive claim without the prior written permission of METABOLIX, such permission not to be unreasonably withheld. If TEPHA shall elect not to file, prosecute, or maintain any such METABOLIX PATENT RIGHT, TEPHA shall so notify METABOLIX in writing with at least thirty (30) days notice prior to any filing, action, payment or the like being due, in which event METABOLIX shall have the right to file, prosecute, or maintain such METABOLIX PATENT RIGHT, and TEPHA shall have no further license rights as to such METABOLIX PATENT RIGHT application or patent under this Agreement.

6.2. Payment of all out-of-pocket fees and costs relating to the

filing, prosecution, and maintenance of those METABOLIX PATENT RIGHTS listed on Appendix B shall be the responsibility of TEPHA, whether such fees and costs were incurred before or after the Effective Date of this Agreement. Payment for out-of-pocket costs incurred by METABOLIX prior to the Effective Date shall be made in three parts:

6.2.1. Twenty-Five Percent (25%) on or before a date six (6) months from the Effective Date of this Agreement;

6.2.2. Twenty-Five Percent (25%) on or before a date nine (9) months from the Effective Date of this Agreement;

6.2.3. The remaining Fifty Percent (50%) on or before a date fifteen (15) months from the Effective Date of this Agreement.

7. INFRINGEMENT

7.1. Each party shall inform the other promptly in writing of any alleged infringement of the PATENT RIGHTS by a third party and of any available evidence thereof.

7.2. During the term of this Agreement, TEPHA shall have the right, but shall not be obligated, to prosecute at its own expense all infringements of the PATENT RIGHTS in the FIELD OF USE and, in furtherance of such right, METABOLIX

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hereby agrees that TEPHA may join METABOLIX as a party plaintiff in any such suit, without expense to METABOLIX. The total cost of any such infringement action commenced solely by TEPHA shall be borne by TEPHA. In the event that TEPHA shall have exercised its right to bring an action, TEPHA shall be responsible for defending against any counterclaims alleging invalidity or unenforceability of a PATENT RIGHT and for prosecuting the action through to settlement or other final disposition. *.

7.3. If within six (6) months after having been notified of any alleged infringement, TEPHA shall have been unsuccessful in persuading the alleged infringer to desist and shall not have brought and shall not be diligently prosecuting an infringement action, or if TEPHA shall notify METABOLIX at any time prior thereto of its intention not to bring suit against any alleged infringer, then, and in those events, only, METABOLIX shall have the right, but shall not be obligated, to prosecute at its own expense any infringement of the PATENTS RIGHTS in the FIELD of USE. In furtherance of such right, TEPHA hereby agrees that METABOLIX may include TEPHA as a party plaintiff in any such suit, without expense to TEPHA. The total cost of any such infringement action commenced or defended solely by METABOLIX shall be borne by METABOLIX, and METABOLIX shall be responsible for defending against any counterclaims alleging invalidity or unenforceability of a PATENT RIGHT.

7.4. Any recovery of damages by the prosecuting party for any such suit shall be applied first in satisfaction of any unreimbursed expenses and legal fees of such party relating to the suit, and next toward reimbursement of METABOLIX for any royalties past due or withheld and applied pursuant to Paragraph 7.2, if applicable. *.

7.5. In the event of the institution of any suit by a third party against METABOLIX, TEPHA or its sublicensees for patent infringment involving the PATENT RIGHTS in the FIELD OF USE, the party sued shall promptly notify the other party in writing. TEPHA shall have the right, but not the obligation, to defend such suit at its own expense. If TEPHA shall elect not to defend, TEPHA shall

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promptly notify METABOLIX. METABOLIX shall have the right, but not the obligation, to defend such suit at its expense.

7.6. If TEPHA shall exercise its rights pursuant to Section 7.5 to defend the PATENT RIGHTS, *:

7.6.1. If the enforceability of all material claims in such PATENT RIGHT claiming the LICENSED PRODUCT or PROCESS is upheld by a court or other legal or administrative tribunal from which no appeal is or can be taken, * or

7.6.2. If one or more claims in such PATENT RIGHT covering the LICENSED PRODUCT or PROCESS shall be held to be invalid or otherwise unenforceable by a court or other legal or administrative tribunal in any country from which no appeal is or can be taken or the scope thereof is modified and, as a result such PATENT RIGHT no longer offers substantial protection to a LICENSED PRODUCT or PROCESS in such country, *.

7.7. In any suit as either party may institute to enforce or defend the PATENT RIGHTS pursuant to this Agreement, the other party hereto shall, at the request and expense of the party initiating such suit, cooperate in all respects and, to the extent possible, have its employees testify when requested and make available relevant records, papers, information, samples, specimens and the like. The parties shall keep one another informed of the status of and of their respective activities regarding any litigation or settlement thereof concerning the PATENT RIGHTS in the FIELD of USE or LICENSED PRODUCTS or PROCESSES ; provided, however, that no settlement or consent judgement or other voluntary final disposition of any suit defended or action brought by a party pursuant to this Article 7 may be entered into without the consent of the other party, such consent not to be unreasonably withheld or delayed. As to the MIT PATENT RIGHTS, no settlement, consent judgement or other voluntary final disposition of the suit may be entered into without the consent of MIT which consent shall not unreasonably be withheld. TEPHA shall indemnify MIT against any order for

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costs that may be made against MIT in proceedings commenced and defended solely by TEPHA.

7.8. TEPHA, during the period of this Agreement, shall have the sole right in accordance with the terms and conditions herein to sublicense any alleged infringer for future use of the PATENT RIGHTS in the FIELD OF USE.

8. PRODUCT LIABILITY

8.1. TEPHA shall at all times during the term of this Agreement and thereafter, indemnify, defend and hold METABOLIX and MIT, their directors, trustees, officers, employees and affiliates, harmless against all claims and expenses, arising out of *.

8.2. Prior to the first use of a LICENSED PRODUCT for humans, TEPHA shall obtain and carry in full force and effect commercial, general liability insurance, including product liability insurance, which shall protect TEPHA, METABOLIX, and MIT with respect to events covered by Paragraph 8.1 above. Such insurance shall be written by a reputable insurance company authorized to do business in the Commonwealth of Massachusetts, shall list METABOLIX and MIT as additional named insureds thereunder, shall be endorsed to include product liability coverage and shall require thirty (30) days written notice to be given to METABOLIX and MIT prior to any cancellation or material change thereof. The limits of such insurance shall not be less than * per occurrence with an aggregate of * for personal injury including death; and * per occurrence with an aggregate of * for property damage. TEPHA shall provide METABOLIX with Certificates of Insurance evidencing the same.

8.3. EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY, NOR MIT, NOR THEIR RESPECTIVE DIRECTORS, TRUSTEES, OFFICERS, EMPLOYEES, AND AFFILIATES MAKE ANY REPRESENTATIONS OR EXTEND ANY WARRANTIES OF

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ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF PATENT RIGHTS CLAIMS, ISSUED OR PENDING, AND THE ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE. NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A REPRESENTATION MADE OR WARRANTY GIVEN BY EITHER PARTY OR BY MIT THAT THE PRACTICE OF THE LICENSES GRANTED HEREUNDER SHALL NOT INFRINGE THE PATENT RIGHTS OR OTHER INTELLECTUAL OR PROPRIETARY RIGHTS OF ANY THIRD PARTY. * TEPHA, MIT OR THEIR RESPECTIVE DIRECTORS, TRUSTEES, OFFICERS, EMPLOYEES AND AFFILIATES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ECONOMIC DAMAGE OR INJURY TO PROPERTY AND LOST PROFITS, REGARDLESS OF WHETHER SUCH PARTY SHALL OR M.I.T. BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY OF THE FOREGOING.

9. EXPORT CONTROLS

9.1. TEPHA acknowledges that it is subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the United States Department of Commerce Export Administration Regulations). The transfer of such items may require a license from the cognizant agency of the United States Government and/or written assurances by TEPHA that TEPHA shall not export data or commodities to certain foreign countries without prior

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approval of such agency. METABOLIX neither represents that a license shall not be required nor that, if required, it shall be issued.

10. NON-USE OF NAMES

10.1. Except as required by law or in raising funding, neither party shall use the names or trademarks of the other, nor of MIT, nor any adaptation thereof, nor the names of any of the other party's or MIT's employees, in any advertising, promotional or sales literature without prior written consent obtained from such party, or MIT, or said employee, in each case, such consent not to be unreasonably withheld, except that TEPHA may state that it is licensed by METABOLIX, or MIT, as applicable, under one or more of the patents and/or applications comprising the METABOLIX PATENT RIGHTS, or the MIT PATENT RIGHTS, respectively. TEPHA may, however, use the name of any employee of METABOLIX who is a consultant or member of an advisory board of TEPHA, with their permission, and provided, also, that their affiliation with METABOLIX is identified.

11. ASSIGNMENT

11.1. Except as expressly provided in Article 2, neither party shall directly or indirectly sell, transfer, assign, or delegate in whole or in part this Agreement, or any rights, duties, obligations or liabilities under this Agreement (collectively "assign"), by operation of law or otherwise without the prior written consent of the other party, such consent not to be unreasonably withheld or delayed; provided, however, so long as the assignee shall not be a competitor of the other party, either party shall have the right to assign all of its rights, duties, obligations and liabilities under this Agreement to any AFFILIATE or in connection with any sale, merger, consolidation, recapitalization or reorganization involving in each case the sale of all or substantially all of the capital stock of the party or the assets of such party to which this Agreement relates. This Agreement shall inure to the benefit of and be

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binding upon the permitted successors and assigns of METABOLIX and TEPHA.

12. DISPUTE RESOLUTION

12.1. Except for the right of either party to apply to a court of competent jurisdiction for a temporary restraining order, a preliminary injunction or other equitable relief to preserve the status quo or to prevent irreparable harm, and except for any dispute relating to patent validity or infringement, any and all claims, disputes or controversies arising under, out of or in connection with the Agreement, shall be mediated in good faith. The party raising such dispute shall promptly advise the other party of such claim, dispute or controversy in a writing which describes in reasonable detail the nature of such dispute. If the parties by their senior management representatives shall be unable to resolve the dispute within thirty (30) days, then by no later than forty (40) business days after the recipient has received such notice of dispute, each party shall have selected for itself a representative who shall have the authority to bind such party, and shall additionally have advised the other party in writing of the name and title of such representative. By no later than sixty (60) business days after the date of such notice of dispute, such representatives shall schedule a date for a mediation hearing with the Cambridge Dispute Settlement Center or Endispute Inc. in Cambridge, Massachusetts. The parties shall enter into good faith mediation and shall share the costs equally. If the representatives of the parties have not been able to resolve the dispute within thirty (30) business days after such mediation hearing, the parties shall have the right to pursue any other remedies legally available to resolve such dispute in either the Courts of the Commonwealth of Massachusetts, or in the United States District Court for the District of Massachusetts, to whose jurisdiction for such purposes METABOLIX and TEPHA each hereby irrevocably consents and submits.

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12.2. Notwithstanding the foregoing, nothing in this Article shall be construed to waive any rights or timely performance of any oblations under this Agreement.

13. CONFIDENTIALTIY

13.1. Both METABOLIX and TEPHA agree that all information disclosed to the other party shall be deemed "Confidential Information" of the disclosing party. In particular, "Confidential Information" shall be deemed to include, but not be limited to, KNOW-HOW, trade secrets, information, ideas, inventions, materials, samples, processes, procedures, methods, formulations, protocols, packaging designs and materials, test data, future development plans, "Product" launch date, technological know-how and engineering, manufacturing, regulatory, marketing, servicing, sales, or financial matters relating to the disclosing party and its business.

13.2. During the term of this Agreement and thereafter each party shall maintain all Confidential Information in confidence and shall not disclose any Confidential Information to any third party or use any such information for any unauthorized purpose. Each party may use such Confidential Information only to the extent required to accomplish the purposes of this Agreement. Both parties shall take precautions as each normally takes with its own confidential and proprietary information to prevent disclosure to third parties, but no less than reasonable precautions.

13.3. Both parties agree that, notwithstanding the above, the obligations of confidentiality and nonuse shall not apply to:

13.3.1. Information that at the time of disclosure is, or thereafter becomes, generally known or available to the public, through no wrongful act or failure to act on the part of the receiving party;

13.3.2. Information that was known by or in the possession of the receiving party at the time of receiving such

information from the disclosing party, as evidenced by written records;

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13.3.3. Information obtained by the receiving party from a third-party source who is not breaching a commitment of confidentiality to the disclosing party by revealing such information to the receiving party;

13.3.4. Information that is developed independently by the receiving party without use of confidential information of the other party, as evidenced by written records;

13.3.5. Information that is the subject of a granted written permission to disclose that is issued by the disclosing party to the other party;

13.3.6. Information that is required to be disclosed pursuant to the law, by request of the FDA or other government authority or for medical or safety reasons, but only to the extent required to be disclosed by the FDA or other government authority; or

13.3.7. Information provided to consultants, subcontractors or agents for purposes consistent with this Agreement pursuant to a non-disclosure agreement with said parties.

13.4. Both Parties shall make diligent efforts to ensure that all employees, consultants, agents and subcontractors who may have access to Confidential Information of the other party, and any other third parties who might have access to Confidential Information, shall sign nondisclosure agreements consistent with the terms set forth in this Section. No Confidential Information shall be disclosed to any employees, subcontractors, agents, consultants or third parties who do not have a need to receive such information for the purposes of this Agreement.

14. TERMINATION

14.1. If TEPHA shall cease to carry on its business, this Agreement shall terminate upon notice by METABOLIX, except as provided in Article 11 (Assignment).

14.2. Should TEPHA fail to make any payment whatsoever due and payable to METABOLIX hereunder, METABOLIX shall have the right to terminate this Agreement effective on sixty (60) days' notice, unless TEPHA shall make all such

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payments to METABOLIX, within said sixty (60) day period. Upon the expiration of the sixty (60) day period, if TEPHA shall not have made all such payments to METABOLIX, the rights, privileges and license granted hereunder shall automatically terminate.

14.3. Upon any material breach or default of this Agreement by TEPHA, other than those occurrences set out in Paragraphs 14.1 and 14.2 hereinabove, which shall always take precedence in that order over any material breach or default referred to in this Paragraph 14.3, METABOLIX shall have the right to terminate this Agreement and the rights, privileges and license granted hereunder effective on one hundred and twenty (120) days' notice to TEPHA. Such termination shall become automatically effective unless TEPHA shall have cured any such material breach or default prior to the expiration of the one hundred and twenty (120) day period. Upon any material breach or default of this Agreement by METABOLIX, TEPHA shall have the right to terminate this Agreement and the rights, privileges and license granted hereunder effective on one hundred and twenty (120) days' notice to METABOLIX. Such termination shall become automatically effective unless METABOLIX shall have cured any such material breach or default prior to the expiration of the one hundred and twenty (120) day period.

14.4. TEPHA shall have the right to terminate this Agreement at any time on six (6) months' notice to METABOLIX, and upon payment of all amounts due METABOLIX through the effective date of the termination.

14.5. Upon termination of this Agreement for any reason, nothing herein shall be construed to release either party from any obligation that matured prior to the effective date of such termination; and Articles 1, 8, 9, 10, 12, 13, 14.5, 14.6, and 16 shall survive any such termination. TEPHA and any sublicensee thereof may, however, after the effective date of such termination, sell all LICENSED PRODUCTS in inventory, and complete LICENSED PRODUCTS in the process of manufacture at the time of such termination and sell the same, provided that TEPHA shall pay to METABOLIX the Running Royalties thereon as required by

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Article 4 of this Agreement and shall submit the reports required by Article 5 hereof on the sales of LICENSED PRODUCTS.

14.6. Upon termination of this Agreement for any reason, any sublicense not then in default shall continue in full force and effect except that METABOLIX shall be substituted in place of the TEPHA, and METABOLIX shall have no obligations under such sublicense beyond their obligations herein.

14.7. Upon termination of this AGREEMENT for any reason *, to all information then in TEPHA's possession relevant to the commercialization of LICENSED PRODUCTS and/or LICENSED PROCESSES, including, but not limited to, KNOW-HOW and IMPROVEMENTS owned or controlled by TEPHA as of the effective date of termination (whether such know-how and improvements shall be owned or CONTROLLED by TEPHA during the two-year period after the EFFECTIVE DATE or at any time during the term of this Agreement), research results, toxicology data, assays, preclinical data, prototypes, manufacturing processes including cell lines and unused, unexpired amounts of LICENSED PRODUCTS, clinical results, regulatory submissions, suppliers and customer lists. *.

15. PAYMENTS, NOTICES AND OTHER COMMUNICATIONS

15.1. Any payment, notice or other communication pursuant to this Agreement shall be sufficiently made or given on the date of mailing if sent to such party by certified first class mail, postage prepaid, return receipt requested addressed to it at its address below or as it shall designate by written notice given to the other party:

In the case of METABOLIX:
President
METABOLIX, Inc.
303 Third Street
Cambridge, Massachusetts 02142

In the case of TEPHA:
President

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TEPHA, Inc.
303 Third Street
Cambridge, Massachusetts 02142

16. MISCELLANEOUS PROVISIONS

16.1. This Agreement shall be construed, governed, interpreted and applied in accordance with the laws of the Commonwealth of Massachusetts, U.S.A., except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent was granted.

16.2. The parties hereto acknowledge that this Agreement sets forth the entire Agreement and understanding of the parties hereto as to

the subject matter hereof, and shall not be subject to any change or modification except by the execution of a written instrument subscribed to by the parties hereto.

16.3. The provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

16.4. The failure of either party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party.

16.5. TEPHA agrees to mark the LICENSED PRODUCTS sold in the United States with all applicable United States patent numbers. All LICENSED PRODUCTS shipped to or sold in other countries shall be marked in such a manner as to conform with the patent laws and practice of the country of manufacture or sale.

IN WITNESS WHEREOF, the parties have duly executed this Agreement the day and year set forth below.

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METABOLIX, INC.

By: /s/ Edward M. Muller

Name: Edward M. Muller

Title: President

Date: 10/1/99

TEPHA, INC.

By: /s/ Simon F. Williams

Name: Simon F. Williams

Title: President

Date: October 1, 1999
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EXHIBIT 10.20

WHENEVER CONFIDENTIAL INFORMATION IS OMITTED HEREIN (SUCH OMISSIONS ARE DENOTED BY AN ASTERISK*), SUCH CONFIDENTIAL INFORMATION HAS BEEN SUBMITTED SEPARATELY TO THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT.

LICENSE AGREEMENT

This Agreement is made and entered into this 9th day of September, 2003 (the "Effective Date") by and between Metabolix, Inc., a corporation duly organized and existing under the laws of the State of Delaware and having its principal office at 303 Third Street, Cambridge, Massachusetts 02142 (hereinafter referred to as "Metabolix"), and Tepha, Inc., a corporation duly organized and existing under the laws of the State of Delaware and having its principal office at 303 Third Street, Cambridge, Massachusetts 02142 (hereinafter referred to as "Tepha").

WHEREAS, Metabolix is the assignee from Monsanto Company ("Monsanto") of all right, title and interest in the Patent Rights, Biological Materials and Know-How (all as defined herein);

WHEREAS, Metabolix wishes to grant, and Tepha wishes to receive, license rights to the Patent Rights, Biological Materials and Know-How; and

WHEREAS, the grant of such license rights is subject to the prior written approval of Monsanto, which has been obtained, and a copy of which is attached as Appendix D for reference only.

NOW THEREFORE, in consideration of the premises and the mutual covenants contained herein, the parties hereto agree as follows:

1. DEFINITIONS.

1.1. "Patent Rights" shall mean: (i) the U.S. and foreign patent applications and patents set forth in Appendix A, and the inventions described and/or claimed therein, and all other patent rights assigned to Metabolix by Monsanto not relating to plant crop production of PHAs shall be added to Appendix A by amendment; (ii) any divisionals, continuations and continuation-in-part applications which shall be directed to subject matter specifically described in such patent applications; (iii) the resulting U.S. and foreign patents; (iv) any reissues, reexaminations or extensions of such patents; and (v) all foreign counterparts of the above patent applications and patents. For the avoidance of doubt, the Patent Rights do not include any of the Zeneca Limited patent rights licensed to Metabolix by Monsanto in the Patent Sub-License Agreement dated May 14, 2001.

1.2. "Biological Materials" shall mean the biological materials set forth in Appendix B, and all Progeny and Unmodified Derivatives of those materials, but excluding Modifications. "Progeny" shall mean an unmodified descendant from the Biological Materials, such as virus from virus, cell from cell, or organism from organism. "Unmodified Derivatives" shall mean substances created by

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Tepha which constitute an unmodified functional subunit or product expressed by the Biological Material(s), (some examples include: subclones of unmodified cell lines, purified or fractionated subsets of the Biological Material(s), proteins expressed by DNA/RNA supplied by Metabolix, or monoclonal antibodies secreted by a hybridoma cell line).

1.3. "Modifications" shall mean substances created by Tepha that contain/incorporate Biological Material(s).

1.4. "Know-How" shall mean the know-how set forth in Appendix C.

1.5. "Field" shall mean IN VIVO human and veterinary medical use of polymers falling within the Patent Rights, including, without limitation, tissue engineering, cell therapy, implantables, medical devices, wound sealants, prescription and non-prescription drug delivery, and contrast agents, BUT EXCLUDING (i) medical disposables, surgical drapes and trays, sanitary products, barrier contraceptives, nutritional and all other diagnostic uses and (ii)

transgenic plant crop production of polymers. For the purpose of clarity, it is agreed and understood that, notwithstanding anything in the prior sentence to the contrary, diagnostic systems and/or devices used to monitor the IN VIVO use of a Licensed Product shall be included within the Field. For the purpose of determining whether a use falls within the Field, the parties shall apply the following guidelines: (x) regulation of a use by the U.S. Food and Drug Administration or other regulatory body shall be indicative but not presumptive that a use is an IN VIVO use, and (y) uses marketed only to physicians shall primarily fall within the Field, and (z) uses marketed directly only to consumers shall primarily fall outside the Field.

1.6. "Net Sales shall mean Tepha's billings for the use, sale, lease or other disposition of Licensed Products and Licensed Processes, and the fair market value of noncash consideration, less:

1.6.1 discounts allowed in amounts customary in the trade;

1.6.2 sales, tariff duties and/or use taxes directly imposed and with reference to particular sales;

1.6.3 outbound transportation prepaid or allowed; and

1.6.4 amounts allowed or credited on returns.

No deduction shall be made for commissions paid to individuals whether they be with independent sales agencies or regularly employed by Licensee and on its payroll, or for cost of collections. Licensed Products shall be considered "sold" when invoiced. "Net Sales" shall not include Licensed Products sold for clinical testing, research or development. If a Licensed Product or Licensed Process shall otherwise be distributed or invoiced for a discounted price substantially lower than customary in the trade or distributed at no cost to Tepha Affiliates or otherwise, Net Sales shall be based on the customary amount billed for such Licensed Products or Licensed Processes.

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Where the Licensed Product is a combination product consisting of material whose composition or manufacture is covered by the Patent Rights ("Patented Material") plus other materials (such as a growth factor, but not, for example, filler materials) that are not covered by the Patent Rights, then "Net Sales" shall mean the Net Sales of the full product multiplied by the fully loaded manufacturing cost of the Patented Material divided by the total fully loaded manufacturing cost of the total combination product. When the Licensed Product consists of a combination product consisting of a component made from the Patented Material plus other components, then "Net Sales" shall mean Net Sales of the total product multiplied by the fully loaded manufacturing cost of the Patented Material component divided by the fully loaded manufacturing cost of the total product. By "fully loaded" is meant the cost of goods sold plus overhead allocated to production and sale thereof.

1.7. "Tepha" and "Metabolix" shall include "Affiliates." "Affiliates" shall mean a related company of Tepha or Metabolix, respectively, the voting stock of which is directly or indirectly at least fifty percent (50%) owned and controlled by Tepha or Metabolix, an organization which directly or indirectly controls more than fifty percent (50%) of the voting stock of Tepha or Metabolix, and an organization the majority ownership of which is directly or indirectly common to the ownership of Tepha or Metabolix.

1.8. "Licensed Process" means any process which is covered in whole or in part by an issued, unexpired valid claim or a pending claim contained in the Patent Rights in the country in which such process is used or in which the Licensed Product made thereby is used or sold.

1.9. "Licensed Product" means any product or part thereof which: (i) is covered in whole or in part by an issued, unexpired valid claim or a pending claim contained in the Patent Rights in the country in which any such product or part thereof is made, used or sold; or (ii) is manufactured by using a process or is employed to practice a process which is covered in whole or in part by an issued unexpired valid claim or a pending claim contained in the Patent Rights in the country in which a Licensed Process is used or in which such product or part thereof is used or sold.

2. LICENSE GRANT AND OWNERSHIP

2.1. NONEXCLUSIVE LICENSE. Subject to the terms and conditions of this Agreement, Metabolix hereby grants to Tepha the worldwide, nonexclusive right and license, with the right to sublicense, in the Field: (i) under the Patent Rights to make, have made, use, lease, sell, offer for sale and import the Licensed Products and to practice the Licensed Processes until the expiration of the last to expire of the Patent Rights, unless this Agreement shall be sooner terminated according to the terms hereof; (ii) to make, have made, use, lease, sell, offer for sale, import and create Modifications of the Biological Materials; and (iii) to use Know-How.

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2.2. EXCLUSIVE LICENSE. Subject to the terms and conditions of this Agreement, Metabolix hereby grants to Tepha the worldwide, royalty-free, exclusive right and license, with the right to sublicense, in the Field to make, have made, use, lease, sell, offer for sale and import Modifications.

2.3. DELIVERY. Tepha shall have thirty (30) days after the Effective Date to review and make copies of the Know-How and Biological Materials. Metabolix makes no representations regarding the viability of any of the Biological Materials. After thirty (30) days from the Effective Date, any request to review or make copies of the Know-How or Biological Materials shall be at Metabolix's discretion.

2.4. OWNERSHIP OF MODIFICATIONS. Tepha hereby assigns to Metabolix all of its right, title and interest in and to the Modifications, including any and all intellectual property rights therein. Tepha also agrees to promptly execute all assignments and patent applications, and similar documents as reasonably requested by Metabolix. If Metabolix shall be unable to obtain Tepha's execution of such documents for any reason, Tepha hereby irrevocably appoints Metabolix and its agents as Tepha's agents and attorneys-in-fact to execute such documents with the same legal effect as if Tepha shall have executed them.

2.5. RIGHT TO SUBLICENSE. Tepha's right to sublicense in Paragraphs 2.1 and 2.2 is subject to Metabolix' prior written approval during the period that Metabolix requires Monsanto's approval to sublicense. Tepha agrees to insert a provision in each sublicense that Metabolix is a third party beneficiary of the sublicense as to the sublicensed Patent Rights, with the right to enforce the applicable terms thereof in the event Tepha does not enforce its rights.

2.6. NO OTHER RIGHTS. Nothing in this Agreement shall be construed to confer any rights upon Tepha by implication, estoppel or otherwise beyond the express licenses granted by Metabolix or as to any technology or patent rights of Metabolix or any other entity other than the Patent Rights, Biological Materials and Know-How.

2.7. MONSANTO RIGHTS. Monsanto retains certain rights to Patent Rights as collateral in the event of default by Metabolix under a Security Agreement between Monsanto and Metabolix dated May 12, 2001, and this Agreement is subject to Monsanto's rights therein. Monsanto has granted its approval of this Agreement in the letter attached as Appendix D; however, Monsanto retains all of its rights during the remaining term of the Security Agreement, including without limitation its rights to Patent Rights as collateral, and in the event Tepha exercises its right to sublicense third parties, such sublicenses shall also be subject to such Monsanto's rights.

3. ROYALTIES

3.1. LICENSE ISSUE FEE. In partial consideration for the license rights granted herein, Tepha shall pay Metabolix a License Issue Fee of * which shall be deemed earned

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and due as follows: * on the Effective Date, and * on each of the six-month, twelve-month and eighteenth-month anniversaries of the Effective Date; provided, however, the balance of the full amount of such License Issue Fee shall be due upon the raising by Tepha of * (cumulatively) after the Effective Date in investment capital and/or research and development funds in connection with the Patent Rights, Biological Materials and Know-How, and payment shall be made within thirty (30) days thereafter.

3.2 RUNNING ROYALTIES. In partial consideration for the license rights granted herein, Tepha shall pay Metabolix running royalties of * of Net Sales by Tepha ("Running Royalty"); provided, however, the maximum cumulative Running Royalties due on particular Net Sales of any Licensed Product or Licensed Process payable by Tepha to Metabolix for any quarter under (i) this Agreement, and (ii) the sublicense from Metabolix to Tepha to certain Massachusetts Institute of Technology patent rights dated October 1, 1999, as amended, shall be * of such Net Sales, subject to any deductions permitted under Paragraph 3.7.

3.3 SUBLICENSE REVENUE. Tepha shall pay Metabolix a * share of gross sublicensing revenue, including sublicense issue fees, milestone payments, license maintenance fees, royalties on net sales, and similar consideration, and including, for the avoidance of doubt, the fair market value of any sublicense rights granted in a multi-part transaction, but excluding research and development funding received by Tepha; provided, however, the maximum cumulative share of gross sublicensing revenue in regard to a particular sublicense payable by Tepha to Metabolix for any quarter under (i) this Agreement, and (ii) the sublicense from Metabolix to Tepha to certain Massachusetts Institute of Technology patent rights dated October 1, 1999, as amended, shall be * of such gross sublicensing revenue. For purposes herein, sublicensees' net sales shall have a parallel meaning to the definition of Tepha's Net Sales in Paragraph 1.6.

3.4 PAYMENTS IN FULL. All payments due hereunder shall be paid in full, without deduction of taxes or other fees which may be imposed by any government, except as otherwise provided in Paragraph 1.6.2.

3.5 NO MULTIPLE ROYALTIES. No multiple Running Royalties shall be payable because any Licensed Product or Licensed Process, its manufacture, use, sale or importation are or shall be covered by more than one patent application or patent licensed under this Agreement.

3.6 PAYMENT. Royalty payments shall be paid in the United States dollars in Cambridge, Massachusetts, or at such other place as Metabolix may reasonably designate consistent with the laws and regulations controlling in any foreign country. If any currency conversion shall be required in connection with the payment of royalties hereunder, such conversion shall be made by using the exchange rate published in the Wall Street Journal on the last business day of the calendar quarterly reporting period to which such royalty payments relate.

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3.7 THIRD PARTY LICENSES. To the extent that Tepha has executed or shall obtain subsequent to the Effective Date licenses to third party patents or other intellectual property that are necessary to manufacture or sell Licensed Products or Licensed Processes in the Field, Tepha may deduct from the Running Royalty due to Metabolix under Paragraph 3.2, * of the running royalties due on such third party patents or intellectual property up to an amount equal to * of the Running Royalties due hereunder.

3.8 APPLICATION OF CREDITS. Any credits against Running Royalties permitted under this Agreement may be applied by Tepha, cumulatively, up to * the Running Royalties otherwise due in the respective quarterly accounting period; provided, Tepha may carry over unused credits to subsequent quarterly accounting periods. Notwithstanding the applicability of credits under one or more Paragraphs of this Agreement, the minimum Running Royalties due from Tepha shall be * of the Running Royalties otherwise payable,

subject to the maximum set forth in Paragraph 3.2.

4. PATENT PROSECUTION

4.1. PATENT PROSECUTION. Throughout the term of this Agreement, Metabolix, at its own expense, shall file, prosecute and maintain the Patent Rights. If Metabolix shall elect not to file, prosecute or maintain any Patent Right, Metabolix shall notify Tepha in writing with at least thirty (30) days notice prior to any filing, action, payment or the like being due, in which event Tepha shall have the right to file, prosecute or maintain such Patent Right, at Tepha's expense in Metabolix' name. Metabolix agrees to execute, and agrees to use reasonable efforts to ensure that its employees shall execute, all documents necessary to perfect filing, advance prosecution and/or effect issue of any patents upon any such applications. After notice of such election by Metabolix, Tepha shall have no further royalty obligations under Paragraphs 3.2 and 3.3 with respect to such patents or applications.

5. RECORDS AND PAYMENTS

5.1. RECORDS AND AUDIT. Tepha shall keep true and accurate books of account containing all particulars that may be necessary for the purpose of showing the amounts payable to Metabolix hereunder. Said books of account shall be kept at Tepha's principal place of business and shall be open at all reasonable times for three (3) years following the end of the calendar year to which they pertain, to the inspection of Metabolix or its agents for the purpose of verifying Tepha's royalty statements or compliance in other respect with this Agreement. Should such inspection lead to the discovery of a greater than * discrepancy in reporting to Metabolix's detriment, Tepha agrees to pay the cost of such inspection.

5.2. REPORTS AND PAYMENTS. Within thirty (30) days after the end of each calendar quarter during the term of this Agreement, Tepha shall send to Metabolix a report showing the Net Sales of the Licensed Products and Licensed Processes,

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including calculation of deductions, and sublicensing gross revenue for such quarter and shall pay the appropriate royalties to Metabolix.

5.3. INTEREST. The amounts due under Articles 3 shall, if overdue, bear interest until payment at a per annum rate * above * in effect at Fleet Bank, or its successors, on the due date. The payment of such interest shall not foreclose Metabolix from exercising any other rights it may have as a consequence of the lateness of any payment.

6. DUE DILIGENCE

6.1. DILIGENT EFFORTS. Tepha shall use diligent efforts to bring one or more Licensed Products or Licensed Processes to market through a thorough, vigorous and diligent program for exploitation of the Patent Rights and shall continue active, diligent development and marketing efforts for one or more Licensed Products or Licensed Processes throughout the term of this Agreement

6.2. GOVERNMENTAL APPROVALS AND MARKETING OF LICENSED PRODUCTS. Tepha or its designees shall be responsible for obtaining all necessary governmental approvals for the development, production, distribution, sale and use of any Licensed Product, at Tepha's, or its designees', expense, including, without limitation, any safety studies. Tepha or its designees shall have sole responsibility for any warning labels, packaging and instructions as to the use of Licensed Products and for the quality control for any Licensed Product.

7. INFRINGEMENT

7.1. NOTICE. Tepha and Metabolix shall each inform the other promptly in writing of any alleged or threatened infringement of the Patent Rights by a third party and of any available evidence thereof.

7.2. PURSUIT OF INFRINGERS. During the term of this Agreement, Tepha shall have the right, but shall not be obligated, to prosecute at its own expense all infringements of the Patent Rights by a third party in the Field by litigation or settlement discussions and, in furtherance of such right, Metabolix agrees that Tepha may join Metabolix as a party plaintiff in any such suit, without expense to Metabolix. The total cost of any such infringement action commenced solely by Tepha shall be borne by Tepha. In the event that Tepha shall have exercised its right to bring an action, Tepha shall be responsible for defending against any counterclaims alleging invalidity or unenforceability of a Patent Right and for prosecuting the action through to settlement or other final disposition. In the event that Tepha shall undertake the enforcement of the Patent Rights in the Field by litigation, Tepha may *.

7.3. If within six (6) months after having been notified of any alleged infringement, Tepha shall have been unsuccessful in persuading the alleged infringer to desist and shall not have brought and shall not be diligently prosecuting an infringement

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action, or if Tepha shall notify Metabolix at any time prior thereto of its intention not to bring suit against any alleged infringer, then, and in those events, only, Metabolix shall have the right, but shall not be obligated, to prosecute at its own expense any infringement of the Patent Rights in the Field. In furtherance of such right, Tepha hereby agrees that Metabolix may include Tepha as a party plaintiff in any such suit, without expense to Tepha. The total cost of any such infringement action commenced or defended solely by Metabolix shall be borne by Metabolix, and Metabolix shall be responsible for defending against any counterclaims alleging invalidity or unenforceability of a Patent Right.

7.4. Any recovery of damages by the prosecuting party for any such suit shall be applied first in satisfaction of any unreimbursed expenses and legal fees of such party relating to the suit, and next toward reimbursement of Metabolix for any royalties past due or withheld and applied pursuant to Paragraph 7.2, if applicable. The balance remaining from any such recovery shall be divided with * to the non-prosecuting party and any remaining balance to the prosecuting party.

7.5. In the event of the institution of any suit by a third party against Metabolix, Tepha or its sublicensees for patent infringement involving the Patent Rights in the Field, the party sued shall promptly notify the other party in writing. Tepha shall have the right, but not the obligation, to defend such suit at its own expense. If Tepha shall elect not to defend, Tepha shall promptly notify Metabolix. Metabolix shall have the right, but not the obligation, to defend such suit at its expense.

7.6. If Tepha shall exercise its rights pursuant to Section 7.5 to defend the Patent Rights, then * until a final decision shall be rendered by a court or administrative tribunal of competent jurisdiction from which no appeal can be or is taken provided that:

7.6.1 If the enforceability of all material claims in such Patent Right claiming the Licensed Product or Licensed Process is upheld by a court of other legal or administrative tribunal from which no appeal is or can be taken, *; or

7.6.2 If one or more claims in such Patent Right covering the Licensed Product or Licensed Process shall be held to be invalid or otherwise unenforceable by a court or other legal or administrative tribunal in any country from which no appeal is or can be taken or the scope thereof is modified and, as a result such Patent Right no longer offers substantial protection to a Licensed Product or Licensed Process in such country, then *.

7.7. In any suit as either party may institute to enforce or defend the Patent Rights pursuant to this Agreement, the other party hereto shall, at the request and expense of the party initiating such suit, cooperate in all respects and, to the extent possible, have

its employees testify when requested and make available relevant records, papers, information, samples, specimens and the like. The parties shall

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keep one another informed of the status of and of their respective activities regarding any litigation or settlement thereof concerning the Patent Rights in the Field or Licensed Products or Licensed Processes; provided, however, that no settlement or consent judgement or other voluntary final disposition of any suit defended or action brought by a party pursuant to this Article 7 may be entered into without the consent of the other party, such consent not to be unreasonably withheld or delayed.

7.8. Tepha, during the period of this Agreement, shall have the sole right in accordance with the terms and conditions herein to sublicense any alleged infringer for future use of the Patent Rights in the Field.

8. PRODUCT LIABILITY

8.1. INDEMNIFICATION. Tepha shall at all times during the term of this Agreement and thereafter, indemnify, defend and hold Metabolix and Monsanto, their directors, officers, employees and Affiliates, harmless against all claims and expenses, arising out of the death of or injury to any person or persons or out of any damage to property and against any other claim, proceeding, demand, expense and liability of any kind whatsoever resulting from or relating to the production, manufacture, sale, use, lease, consumption or advertisement of the Licensed Products and/or Licensed Process(es) *.

8.2. INSURANCE. Prior to the first use of a Licensed Product for humans, Tepha shall obtain and carry in full force and effect commercial, general liability insurance, including product liability insurance, which shall protect Tepha, Metabolix and Monsanto with respect to events covered by Paragraph 8.1 above. Such insurance shall be written by a reputable insurance company authorized to do business in the Commonwealth of Massachusetts, shall list Metabolix and Monsanto as additional named insured thereunder, shall be endorsed to include product liability coverage and shall require thirty (30) days written notice to be given to Metabolix prior to any cancellation or material change thereof. The limits of such insurance shall not be less than * per occurrence with an aggregate of * for personal injury including death; and * per occurrence with an aggregate of * for property damage. Tepha shall provide Metabolix with Certificates of Insurance evidencing the same. Tepha shall maintain such commercial general liability insurance during the period that any Licensed Product or Licensed Process is being used, distributed or sold and for six (6) years thereafter.

9. WARRANTIES AND DISCLAIMER

9.1. *

9.2. DISCLAIMER. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT: NEITHER PARTY, NOR THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES AND AFFILIATES MAKE ANY REPRESENTATIONS OR EXTEND ANY WARRANTIES OF ANY KIND,

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EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, VALIDITY OF PATENT RIGHTS CLAIMS, ISSUED OR PENDING, AND THE ABSENCE OF LATENT OR OTHER DEFECTS, WHETHER OR NOT DISCOVERABLE. NOTHING IN THIS AGREEMENT SHALL BE CONSTRUED AS A REPRESENTATION MADE OR WARRANTY GIVEN BY EITHER PARTY OR BY MONSANTO THAT THE PRACTICE OF THE LICENSES GRANTED HEREUNDER SHALL NOT INFRINGE THE PATENT RIGHTS OR OTHER INTELLECTUAL OR PROPRIETARY RIGHTS OF ANY THIRD PARTY.

10. LIMITATION OF LIABILITY

10.1. NO CONSEQUENTIAL DAMAGES. * IN NO EVENT SHALL METABOLIX, TEPHA, OR THEIR RESPECTIVE DIRECTORS, OFFICERS, EMPLOYEES AND AFFILIATES BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING ECONOMIC DAMAGE OR INJURY TO PROPERTY AND LOST PROFITS, REGARDLESS OF WHETHER SUCH PARTY SHALL BE ADVISED, SHALL HAVE OTHER REASON TO KNOW, OR IN FACT SHALL KNOW OF THE POSSIBILITY OF THE FOREGOING.

11. EXPORT CONTROLS

11.1. Tepha acknowledges that it is subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the United States Department of Commerce Export Administration Regulations). The transfer of such items may require a license from the cognizant agency of the United States Government and/or written assurances by Tepha that Tepha shall not export data or commodities to certain foreign countries without prior approval of such agency. Metabolix neither represents that a license shall not be required nor that, if required, it shall be issued.

12. NON-USE OF NAMES

12.1. Except as required by law or in raising funding, neither party shall use the names or trademarks of the other, nor any adaptation thereof, nor the names of any of the other party's employees, in any advertising, promotional or sales literature without prior written consent obtained from such party, or said employee, in each case, such consent not to be unreasonably withheld, except that Tepha may state that it is licensed by Metabolix, under one or more of the patents and/or applications comprising the Patent Rights. Tepha may, however, use the name of any employee of Metabolix who is a consultant or member of an advisory board of Tepha, with their permission, and provided, also, that their affiliation with Metabolix is identified.

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13. DISPUTE RESOLUTION

13.1. Except for the right of either party to apply to a court of competent jurisdiction for a temporary restraining order, a preliminary injunction or other equitable relief to preserve the status quo or to prevent irreparable harm, and except for any dispute relating to patent validity or infringement, any and all claims, disputes or controversies arising under, out of or in connection with the Agreement, shall be mediated in good faith. The party raising such dispute shall promptly advise the other party of such claim, dispute or controversy in a writing which describes in reasonable detail the nature of such dispute. If the parties by their senior management representatives shall be unable to resolve the dispute within thirty (30) days, then by no later than forty (40) business days after the recipient has received such notice of dispute, each party shall have selected for itself a representative who shall have the authority to bind such party, and shall additionally have advised the other party in writing of the name and title of such representative. By no later than sixty (60) business days after the date of such notice of dispute, such representatives shall schedule a date for a mediation hearing with the Cambridge Dispute Settlement Center or Endispute Inc. in Cambridge, Massachusetts or another mutually agreeable mediator. The parties shall enter into good faith mediation and shall share the costs equally. If the representatives of the parties have not been able to resolve the dispute within thirty (30) business days after such mediation hearing, the parties shall have the right to pursue any other remedies legally available to resolve such dispute in either the Courts of the Commonwealth of Massachusetts, or in the United States District Court for the District of Massachusetts, to whose jurisdiction for such purposes Metabolix and Tepha each hereby irrevocably consents and submits.

13.2. Notwithstanding the foregoing, nothing in this Article shall be construed to waive any rights or timely performance of any obligations under this Agreement.

14. CONFIDENTIALITY

14.1. CONFIDENTIAL INFORMATION. Both Metabolix and TEPHA agree that all confidential information disclosed to the other party shall be deemed "Confidential Information" of the disclosing party. In particular, "Confidential Information" shall be deemed to include, but not be limited to, Know-How, Biological Materials, trade secrets, information, ideas, inventions, materials, samples, processes, procedures, methods, formulations, protocols, packaging designs and materials, test data, future development plans, "Product" launch date, technological know-how and engineering, manufacturing, regulatory, marketing, servicing, sales, or financial matters relating to the disclosing party and its business.

14.2. NONDISCLOSURE AND NONUSE. During the term and thereafter each receiving party: (i) shall maintain all Confidential Information in confidence; (ii) shall not disclose any Confidential Information to any third party without prior written consent of the disclosing party except that the receiving party may disclose in connection

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with consultants, subcontractors or agents or raising funding and technical development activities for purposes consistent with this Agreement pursuant to a written non-disclosure agreement with said parties, having terms of nondisclosure and nonuse at least as restrictive as those set forth herein; and (iii) shall use such Confidential Information only to the extent required to accomplish the purposes of this Agreement. A receiving party may disclose Confidential Information that is required to be disclosed pursuant to the law, by request of the FDA or other government authority or for medical or safety reasons, but only to the extent required to be disclosed by the FDA or other government authority. Both parties shall take precautions as each normally takes with its own confidential and proprietary information to prevent disclosure to third parties, but no less than reasonable precautions.

14.3. EXCEPTIONS. Both parties agree that, notwithstanding the above, the obligations of confidentiality and nonuse shall not apply to:

14.3.1 Information that at the time of disclosure is, or thereafter becomes, generally known to the public, through no wrongful act or failure to act on the part of the receiving party;

14.3.2 Information that was known by or in the possession of the receiving party at the time of receiving such information from the disclosing party, as evidenced by written records;

14.3.3 Information obtained by the receiving party from a third party who is not breaching a commitment of confidentiality to the disclosing party by revealing such information to the receiving party, as evidenced by written records; or

14.3.4 Information that is developed independently by the receiving party without use of confidential information of the other party, as evidenced by written records.

14.4. Both Parties shall make diligent efforts to ensure that all employees, consultants, agents and subcontractors who may have access to Confidential Information of the other party, and any other third parties who might have access to Confidential Information, shall sign nondisclosure agreements consistent with the terms set forth in this Paragraph. No Confidential Information shall be disclosed to any employees, subcontractors, agents, consultants or third parties who do not have a need to receive such information for the purposes of this Agreement.

15. TERMINATION

15.1. TERMINATION BY METABOLIX. If Tepha shall cease to carry on its business, this Agreement shall terminate effective upon notice by Metabolix.

15.2. TERMINATION FOR NONPAYMENT. Should Tepha fail to make any payment whatsoever due and payable to Metabolix hereunder, Metabolix shall have the right to terminate this Agreement effective on sixty (60)

days' notice, unless Tepha shall make all such payments to Metabolix, within said sixty (60) day

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period. Upon the expiration of the sixty (60) day period, if Tepha shall not have made all such payments to Metabolix, the rights, privileges and license granted hereunder shall automatically terminate.

15.3. TERMINATION FOR MATERIAL BREACH. Upon any material breach or default of this Agreement by Tepha, other than those occurrences set out in Paragraphs 15.1 and 15.2 hereinabove, which shall always take precedence in that order over any material breach or default referred to in this Paragraph 15.3, Metabolix shall have the right to terminate this Agreement and the rights, privileges and license granted hereunder effective on one hundred and twenty (120) days' notice to Tepha. Such termination shall become automatically effective unless Tepha shall have cured any such material breach or default prior to the expiration of the one hundred and twenty (120) day period. Upon any material breach or default of this Agreement by Metabolix, Tepha shall have the right to terminate this Agreement and the rights, privileges and license granted hereunder effective on one hundred and twenty (120) days' notice to Metabolix. Such termination shall become automatically effective unless Metabolix shall have cured any such material breach or default prior to the expiration of the one hundred and twenty (120) day period.

15.4. TERMINATION BY TEPHA. Tepha shall have the right to terminate this Agreement at any time on six (6) months' notice to Metabolix, and upon payment of all amounts due Metabolix through the effective date of termination.

15.5. DEFINITION OF EXPIRATION. For purposes of this Agreement, the term "expiration" shall mean expiration of the last to expire of the Patent Rights, and the co-terminus expiration of this Agreement, subject to the surviving licenses and provisions. The term "termination" shall mean termination of this Agreement prior to expiration in accordance with this Article 15.

15.6. EFFECTS OF TERMINATION. Upon expiration or termination of this Agreement for any reason: (i) nothing herein shall be construed to release either party from any obligation that matured prior to expiration or the effective date of termination; (ii) Articles 1, 2.4, 5.1 (for three (3) years), 7.1 (as to any infringement action instituted prior to termination), 8, 10, 13, 14, 16.4, 16.5, 16.6 and 17 shall survive expiration or any termination; (iii) for a period of six (6) months after the effective date of termination, Tepha and its sublicensees may sell Licensed Products in inventory, and complete Licensed Products in the process of manufacture at the time of such termination and sell the same, provided that Tepha shall pay the Running Royalties thereon as required by Article 3 of this Agreement and shall submit the reports required by Article 5 hereof on the sales of Licensed Products; (iv) if requested, each party shall immediately return all Confidential Information to the disclosing party and shall cease and refrain from any further use of such Confidential Information; (v) upon termination of this Agreement for any reason, any sublicense not then in default shall continue in full force and effect except that Metabolix shall be substituted in place of the Tepha, and Metabolix shall have no obligations under such sublicense beyond their

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obligations herein; (vi) upon termination (as defined in Paragraph 15.5), if requested by Metabolix, Tepha shall return all Biological Materials and Know-How; and (vii) after expiration of this Agreement (as defined in Paragraph15.5), Tepha shall retain a perpetual, irrevocable, royalty-free, non-exclusive, transferable, worldwide license in the Field, with the right to sublicense, to use the Know-How.

15.7. LICENSE TO METABOLIX. Upon termination of this Agreement for any

reason (except expiration or termination by Tepha for breach by Metabolix under Paragraph 15.3), Tepha shall, grant and hereby grants Metabolix a nonexclusive license, with the right to sublicense, to all information then in Tepha's possession relevant to the commercialization of Licensed Products and/or Licensed Processes, including, but not limited to, research results, toxicology data, assays, preclinical data, prototypes, manufacturing processes including cell lines and unused, unexpired amounts of Licensed Products, clinical results, regulatory submissions, suppliers and customer lists. In such event Tepha shall receive a royalty equal to * of the gross amount of consideration, if any, subsequently received by Metabolix with respect to the Licensed Products and Licensed Processes.

16. GENERAL

16.1. INTEGRATED AGREEMENT. This Agreement (including its Appendices, which are incorporated herein by reference) constitutes the complete and exclusive statement of the agreement between the parties, and supersedes all prior agreements, proposals, negotiations and communications between the parties, both oral and written, regarding the subject matter hereof.

16.2. WAIVER OR AMENDMENT. No waiver, alteration or amendment of any of the provisions of this Agreement shall be binding unless made in writing and signed by each of the parties hereto.

16.3. NOTICES. Any payment, notice or other communication pursuant to this Agreement shall be sufficiently made or given on the date of mailing if sent to such party by certified first class mail, postage prepaid, return receipt requested addressed to it at its address below or as it shall designate by written notice given to the other party.

If to Metabolix:

Metabolix, Inc.
303 Third Street
Cambridge, MA 02142
Attn: President
Fax: 617-492-1996

If to Tepha:

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Tepha, Inc.
303 Third Street
Cambridge, MA 02142
Attn: President
Fax: 617-492-1996

All such notices, if properly addressed, shall be effective when received.

16.4. GOVERNING LAW. This Agreement shall be construed, governed, interpreted and applied in accordance with the laws of the Commonwealth of Massachusetts, without regard to conflict of laws principles, and as necessary the laws of the United States of America, except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent was granted. Each party agrees that venue for any dispute arising under this Agreement shall be Boston, Massachusetts, and waives any objection it has or may have in the future with respect to such venue.

16.5. FAILURE TO EXERCISE REMEDY. If either party fails to enforce any term of this Agreement or fails to exercise any remedy, such failure to enforce or exercise on that occasion shall not prevent enforcement or exercise on any other occasion.

16.6. NON-EXCLUSIVE RIGHTS. The rights and remedies of the parties provided in this Agreement shall not be exclusive and are in addition to any other rights and remedies available at law or in equity.

16.7. ASSIGNMENT. Except as expressly provided in Article 2, neither party shall directly or indirectly sell, transfer, assign or

delegate in whole or in part this Agreement, or any rights, duties, obligations or liabilities under this Agreement (collectively "assign"), by operation of law or otherwise, without the prior written consent of the other party, such consent not to be unreasonably withheld or delayed; provided, however, so long as the assignee shall not be a competitor of the other party, either party shall have the right to assign without consent all of its rights, duties, obligations and liabilities under this Agreement to any Affiliate or in connection with any sale, merger, consolidation, recapitalization or reorganization involving in each case the sale of all the capital stock of the party or all or substantially all of the assets of such party to which this Agreement relates. Subject to the foregoing, this Agreement shall inure to the benefit of and be binding upon the permitted successors and assigns of Metabolix and Tepha.

16.8. INDEPENDENT CONTRACTORS. The parties agree that in the performance of this Agreement they are and shall be independent contractors. Nothing herein shall be construed to constitute either party as the agent of the other party for any purpose whatsoever, and neither party shall bind or attempt to bind the other party to any contract or the performance of any obligation or represent to any third party that it has any right to enter into any binding obligation on the other party's behalf.

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16.9. SEVERABILITY. The provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

16.10. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

16.11. PATENT MARKING. Tepha shall apply the patent marking notices required by the law of any country where Licensed Products are made, used, sold or imported.

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IN WITNESS WHEREOF, the parties have duly executed this Agreement the day and year set forth below.

Metabolix, Inc.	Tepha, Inc.
By: /s/ Oliver P. Peoples	By: /s/ Simon F. Williams
Name: Oliver P. Peoples	Name: Simon F. Williams
Title: Vice President R & D	Title: President
Date: September 9, 2003	Date: September 9, 2003

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WHENEVER CONFIDENTIAL INFORMATION IS OMITTED HEREIN (SUCH OMISSIONS ARE DENOTED BY AN ASTERISK*), SUCH CONFIDENTIAL INFORMATION HAS BEEN SUBMITTED SEPARATELY TO THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT.

TECHNOLOGY ALLIANCE AND OPTION AGREEMENT

This Technology Alliance and Option Agreement (the "Agreement") dated as of November 3, 2004 (the "Effective Date") is by and between ADM Polymer Corporation, a corporation duly incorporated and validly existing under the laws of the State of Delaware, with headquarters located at 4666 Faries Parkway, Decatur, IL 62526 ("ADM Sub"), and Metabolix, Inc., a corporation duly incorporated and validly existing under the laws of the State of Delaware, with headquarters located at 21 Erie Street, Cambridge, MA 02139-4260 ("MBX") (MBX and ADM Sub are collectively the "Parties" and each is a "Party").

RECITALS

WHEREAS, MBX has developed technology relating to the fermentation, recovery and formulation of PHA Material (as defined below) and possesses patents, trade secrets and other intellectual property rights in relation thereto;

WHEREAS, MBX is seeking a collaborator to participate, in the continued commercialization of the PHA Material;

WHEREAS, ADM Sub has capabilities and resources relating to the fermentation of PHA Materials and desires to employ the MBX technology in commercial scale reactors too confirm performance parameters and potential manufacturing economics;

WHEREAS, ADM Sub is a wholly owned subsidiary of Archer-Daniels-Midland Company ("ADM"); and

WHEREAS, ADM Sub and MBX desire to enter into an agreement under which the two Parties would cooperate in the preparation of certain hatches of PHA Material and under which MBX would grant to ADM Sub the option to enter into a commercial alliance to further commercialize the PHA Material, all on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the recitals and the mutual covenants and promises contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto do hereby agree as follows.

ARTICLE 1
DEFINITIONS

"ADM SUB BACKGROUND TECHNOLOGY" means any Technology used by ADM Sub, or provided by ADM Sub for use, in the Technology Alliance Program that is Controlled by ADM Sub: (a) as of the Effective Date, or (b) developed, conceived or reduced to practice solely by employees of, or consultants to, ADM Sub or its Affiliates in the conduct of activities outside the

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Technology Alliance Program, without the material use of any MBA Technology or Program Technology.

"ADM SUB CONSTRUCTION MASTER PLAN AND BUDGET" shall have the meaning set forth in Section 3.1.

"ADM SUB MANUFACTURING FACILITY" means an ADM Sub facility designed to produce, through microbial fermentation, approximately fifty thousand (50,000) tons of PHA Material, having an acceptable level of purity, during each twelve (12) month period, on an ongoing basis through a stable and robust operation, over a period of years.

"ADM SUB PATENT RIGHTS" means any Patent Rights Controlled by ADM Sub and claiming or covering the ADM Sub Technology.

"ADM SUB PROGRAM TECHNOLOGY" means any Technology developed, conceived or reduced to practice solely by employees of, or consultants to, ADM Sub or its Affiliates (alone or jointly with a third party) during the course of performance of the Technology Alliance Program, with or without the material use of any MBX Technology or Program Technology. Nothing in this definition shall be construed as conveying any rights on ADM Sub to practice any MBX Technology

after the Term.

"ADM SUB PROPRIETARY MATERIALS" means any Proprietary Materials Controlled by ADM Sub and used by ADM Sub, provided by ADM Sub for use, or necessary or useful in the Technology Alliance Program.

"ADM SUB TECHNOLOGY" means, collectively, ADM Sub Proprietary Materials, ADM Sub Background Technology and ADM Sub Program Technology.

"AFFILIATE" of a Person means any other Person that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such Person. "Control" and, with correlative meanings, the terms "controlled by" and "under common control with" shall mean the power to direct or cause the direction of the management or policies of a Person, whether through the ownership of voting securities, by contract, resolution, regulation or otherwise. Tepha, Inc. is hereby deemed not to be an Affiliate of MBX.

"COMMERCIAL ALLIANCE" shall have the meaning set forth in the Commercial Alliance Agreement.

"COMMERCIAL ALLIANCE AGREEMENTS" means the agreements titled "Commercial Alliance Agreement," "Manufacturing Agreement," "Formulation Agreement," "Operating Agreement," "ADM Sub Services Agreement," "MBX Services Agreement," and "Loan and Security Agreement" attached hereto as EXHIBIT A to be executed and delivered by the parties indicated therein upon the exercise of the Option by ADM Sub in accordance with the terms of this Agreement.

"COMMERCIALLY REASONABLE EFFORTS" shall mean, with respect to the efforts to be applied by a Party in performing a referenced obligation hereunder, the amount and quality of effort and resources that would be applied by a reasonable manager or management team at a corporation

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having comparable expertise and assets as such Party, to accomplish a task or to perform an obligation having comparable relative importance to the success or failure of a commercial enterprise that is comparable to the Commercial Alliance. For purposes of this definition, a commercial enterprise would be comparable to the Commercial Alliance if it poses similar anticipated technical and business risks or challenges and similar anticipated Financial return to the Parties as measured at the time of the expenditure of the effort. When ADM Sub has an obligation to use "Commercially Reasonable Efforts" herein, the following shall apply: (i) the term "Commercially Reasonable Efforts" shall be defined as it is in this definition but by reference to ADM Sub and ADM as if they were a single entity and (ii) in determining whether ADM Sub has satisfied its obligation, the efforts applied by and ADM Sub and ADM shall both be taken fully into account.

"CONFIDENTIAL INFORMATION" means: (a) all tangible embodiments of Technology produced or discovered by a Party, or jointly by one or more Parties under the Technology Alliance Program, and all information concerning the terms of this Agreement, and (b) with respect to a Party (the "Receiving Party"), all information, Technology and Proprietary Materials which are disclosed by another Party (the "Disclosing Party") to the Receiving Party hereunder or to any of its employees, consultants, or Affiliates; except to the extent that the information, (i) as of the date of disclosure is demonstrably known to the Receiving Party or its Affiliates, as shown by written documentation, other than by virtue of a prior confidential disclosure to such Party or its Affiliates; (ii) as of the date of disclosure is in, or subsequently enters, the public domain, through no fault or omission of the Receiving Party, or any of its Affiliates; (iii) is obtained from a third party having a lawful right to make such disclosure free from any obligation of confidentiality to the Disclosing Party; or (iv) is independently developed by or for the Receiving Party without reference to or reliance upon any Confidential Information of the Disclosing Party as demonstrated by competent written records.

"CONSTRUCTION" AND "CONSTRUCT" shall mean, in respect to a building, the activities, and their performance, that are usual and appropriate to create a completed facility that: (i) is in all material respects in compliance with all material safety, health, zoning, environmental and other regulations and laws applicable to it whether such applicability is based on its location, physical dimensions and attributes, its intended uses or otherwise and (ii) is designed to enable and support state-of-the-art operations pertaining to its intended purpose. The terms "Construction" and "Construct" shall include the following activities and their performance with respect to a facility: planning, designing, engineering, construction, procurement, equipping and acquiring the necessary permits.

"CONSTRUCTION COSTS" are those costs and expenses that are included in the

ADM Sub Construction Master Plan and Budget as approved by the TAC in accordance with Section 3.2.5 to the extent actually incurred by ADM Sub in the Construction of the ADM Sub Manufacturing Facility.

"CONTROL" OR "CONTROLLED" means (a) with respect to Technology (other than Proprietary Materials) or Patent Rights, the possession by a Party of the ability to grant a license or sublicense to such Technology or Patent Rights as provided herein without violating the terms of any agreement or arrangement between such Party and any third party, and (b) with respect to Proprietary Materials, the possession by a Party of the ability to supply such Proprietary

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Materials to the other Party for use as provided herein without violating the terms of any agreement or arrangement between the supplying Party and any third party.

"EFFECTIVE DATE" means the date first above written.

"FERMENTATION PERFORMANCE PARAMETERS" means the various parameters for production of PHA Cell Paste through fermentation at the * scale and the * scale as set forth on EXHIBIT B.

"FIELD" means the research, development, manufacture, use, sale and importation of PHA Material and PHA Formulations; provided that the Field shall not include any uses that are within the "Field of Use" as that term is defined in the License Agreement by and between MBX and Tepha, Inc. dated October 1, 1999.

"GOAL" shall have the meaning set forth in Section 3.1.

"JOINT PROGRAM TECHNOLOGY" means Technology developed, conceived or reduced to practice jointly by employees of, or consultants to, the Parties (with or without a third party) during the course of performance of the Technology Alliance Program. Nothing in this definition shall be construed as conveying any rights on ADM or ADM Sub to practice any MBX Technology after the Term. Nothing in this definition shall be construed as conveying any rights on MBX to practice any ADM Sub Technology after the term.

"JOINT SALES COMPANY" shall have the meaning set forth in the Commercial Alliance Agreement.

"KNOWLEDGE" means, with respect to MBX, the actual knowledge and awareness, without the requirement of investigation, of any of the following four (4) members of MBX management: President and CEO, Chief Scientific Officer, Chief Financial Officer and Director of Manufacturing and Development, without the requirement of investigation, and, with respect to ADM Sub, the actual knowledge and awareness, without the requirement of investigation, of any of the following nine (9) members of ADM management: Senior Vice President (Corn Processing and Food Specialties) (John D. Rice), President of Natural Health & Nutrition Division (Steven J. Furcich), Assistant Controller (Marc A. Sanner), Corporate Counsel Intellectual Property (Brian R. Leslie), Senior Attorney (Bradley E. Riley), Senior Vice President Venture Research (Mark G. Matlock), Vice President Technology Assessment (Terry A. Stoa), President of ADM Research Division (Thomas P. Binder), and Vice President of Research, Molecular Biology - Fermentation (Leif P. Solheim).

"MANUFACTURING COST" shall mean the costs incurred by ADM Sub in manufacturing and packaging the Marketing Material as specified in EXHIBIT C, calculated and payable in the manner set forth in this Agreement.

"MARKETING MATERIAL" shall have the meaning set forth in Section 3.3.

"MBX APPLICATIONS PATENT RIGHTS" means any Patent Rights Controlled by MBX that claim or cover specific uses, within the Field, of PHA Materials or PHA Formulations.

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"MBX BACKGROUND TECHNOLOGY" means any Technology used by MBX, or provided by MBX for use, in the Technology Alliance Program that is Controlled by MBX: (a) as of the Effective Date, or (b) developed, conceived or reduced to practice solely by employees of, or consultants to, MBX or its Affiliates in the conduct of activities outside the Technology Alliance Program, without the material use of any ADM Sub Technology or Program Technology.

"MBX PATENT RIGHTS" means any Patent Rights Controlled by MBX and claiming

or covering the MBX Technology, including without limitation the MBX Applications Patent Rights.

"MBX PROGRAM TECHNOLOGY" means any Technology developed; conceived or reduced to practice solely by employees of, or consultants to, MBX or its Affiliates (alone or jointly with a third party) during the course of performance of the Technology Alliance Program, with or without the material use of any ADM Sub Technology or Program Technology.

"MBX PROPRIETARY MATERIALS" means any Proprietary Materials Controlled by MBX and used by MBX, provided by MBX for use, or necessary or useful in the Technology Alliance Program. MBX Proprietary Materials shall include, without limitation, all PHA Material and PHA Formulations supplied as samples to ADM Sub, all cell lines (including all master stocks and working stock whether prepared by ADM Sub or MBX) and all fermentation media, supplied by MBX to ADM Sub, and all progeny, derivatives and mutated forms developed therefrom.

"MBX TECHNOLOGY" means, collectively, MBX Proprietary Materials, MBX Background Technology and MBX Program Technology.

"OPTION" shall have the meaning set forth in Section 4.3 hereof.

"PATENT RIGHTS" means the rights and interests in and to issued patents and pending patent applications (which for purposes of this Agreement shall be deemed to include certificates of inventions and applications for certificates of invention and priority rights) in any country, including all provisional applications, substitutions, continuations, continuations-in-part, divisionals, and renewals, all letters patent granted thereon, and all reissues, reexaminations and extensions thereof Controlled by a Party.

"PERMITTED ACTIVITIES" shall have the meaning set forth in Section 6.1.

"PERSON" means any individual, partnership (whether general or limited), limited liability company, corporation, trust, estate, association, nominee or other entity.

"PHA CELL PASTE" means the paste, containing the PHA Material, recovered from whole fermentation broth and meeting the specifications set forth in EXHIBIT D.

"PHA FORMULATIONS" means PHA Material that has been processed by blending different types of PHA Material together with other polymers and/or with other additives, including nucleants, clarifiers, flow modifiers, plasticizers, flame retardants and heat stabilizers.

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"PHA KNOW-HOW MATERIAL" means PHA Material, the manufacture, use, sale or importation of which is accomplished or performed with the use of the MBX Technology or Joint Program Technology.

"PHA MATERIAL" means the following forms of polyhydroxyalkanoate: *, when produced by any means other than via Plants, and any other forms of polyhydroxyalkanoate, produced by any means other than via Plants, that are substitutable by any customer with one or more of the above substances, are generally technically and commercially feasible in the marketplace, and have a potential adverse affect on the sales or profitability of the Joint Sales Company in a material way. For avoidance of doubt, any PHB copolymers having at least fifty percent (50%) of the *, when produced by any means other than via Plants, are hereby deemed to be included in the definition of PHA Material.

"PHA PATENTED MATERIAL" means PHA Material, the manufacture, use, sale or importation of which within or into the United States by a Person other than MBX, absent the licenses granted herein, would infringe a Valid Claim of the MBX Patent Rights or a Valid Claim within Patent Rights claiming or covering any Technology within the Joint Program Technology.

"PHA RELATED MATERIALS" means any polymer material consisting of one or more hydroxyacids of the general formula: *

"PHA SUPPLEMENTAL KNOW HOW MATERIAL" means PHA Material, the manufacture, use, sale or importation of which is accomplished or performed with the use of a cell Line Controlled by MBX and delivered by MBX to ADM Sub at any time during the Term.

"PLANTS" shall mean photosynthetic organisms when not raised through fermentation, but in any case excluding *. For avoidance of doubt, * is included within the definition of Plants.

"PROGRAM TECHNOLOGY" means ADM Sub Program Technology, Joint Program Technology and MBX Program Technology.

"PROPRIETARY MATERIALS" means any tangible chemical, biological or physical research materials that are furnished by or on behalf of one Party to the other Party (the "Receiving Party") in connection with this Agreement, regardless of whether such materials are specifically designated as proprietary by the transferring Party, except to the extent that the materials, (i) are already in the possession of the Receiving Party or its Affiliates, as shown by written documentation, other than by virtue of a prior delivery of such materials to the Receiving Party or its Affiliates from the other Party or one of its Affiliates subject to confidentiality obligations; (ii) as of the date of disclosure is in the public domain (without restriction on use or availability), or subsequently enters the public domain (without restriction on use or availability) through no fault or omission of the Receiving Party or any of its Affiliates; (iii) is obtained from a third party having a lawful right to provide such material free from any restriction on use; or (iv) is independently developed by or for the Receiving Party without reference to or reliance upon any Proprietary Materials of the Disclosing Party as demonstrated by clear and convincing evidence.

"RECOVERY PERFORMANCE PARAMETERS" shall mean the various parameters for performance of recovery of PHA Material from PHA Cell Paste as set forth on EXHIBIT E.

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"ROYALTY TERM" means that period commencing upon the * from the Effective Date.

"SENIOR EXECUTIVES" shall have the meaning set forth in Section 11.3.1.

"SUPPLEMENTAL ROYALTY TERM" means that period commencing upon the delivery by MBX to ADM or ADM Sub of a cell line Controlled by MBX used in the production or manufacture of PHA Supplemental Know How Material and ending upon the * to occur of (i) the *, and (ii) * from the date of such delivery.

"TECHNICAL ASPECTS OF THE GOAL" shall have the meaning set forth in Section 3.1.

"TECHNOLOGY" means and includes all inventions, discoveries, improvements, trade secrets, know-how and proprietary methods and Proprietary Materials, whether or not patentable.

"TECHNOLOGY ALLIANCE COMMITTEE" or "TAC" shall have the meaning set forth in Section 2.1.

"TECHNOLOGY ALLIANCE OUTPUT" shall have the meaning set forth in Section 3.3.

"TECHNOLOGY ALLIANCE PLAN" shall mean the detailed plan for conducting the Technology Alliance Program attached hereto as EXHIBIT F , subject to such additions and amendments as the TAC shall determine in accordance with Section 2.1.1.

"TECHNOLOGY ALLIANCE PROGRAM" shall mean the research, development and evaluative activities to be conducts by the Parties as set forth herein, and in the Technology Alliance Plan.

"TECHNOLOGY TRANSFER" shall have the meaning set forth in Section 3.2.2.

"THIRD PARTY IP ROYALTY OFFSET" shall have the meaning set forth in Section 8.4.2(b).

"VALID CLAIM" means a claim within a patent application or patent that has not been abandoned or finally determined to be unenforceable or invalid by a court or administrative agency with competent jurisdiction where all appeal rights have been exhausted or expired.

ARTICLE 2
ADMINISTRATION OF THE TECHNOLOGY ALLIANCE

2.1 TECHNOLOGY ALLIANCE COMMITTEE. MBX and ADM Sub shall establish a Technology Alliance Committee (the "Technology Alliance Committee" or "TAC") to plan and oversee the execution of the Technology Alliance Program.

2.1.1 RESPONSIBILITIES OF TAC. The TAC shall review and oversee the progress of the Technology Alliance Program and recommend necessary amendments to the Technology Alliance Plan prior to its initial implementation and also during the conduct of the Technology Alliance

Program. The TAC shall review and approve the ADM Sub Construction Master Plan and Budget.

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2.1.2 MEMBERSHIP OF TAC. Each Party shall appoint three (3) members to the TAC one of which shall be designated as its "Co-Chair." Each Party shall have the right at any time to substitute individuals, on a permanent or temporary basis, for any of its previously designated representatives to the TAC, including its Co-Chair, by giving written notice thereof to the other Party. Initial designees of ADM Sub and MBX to the TAC shall be as set forth on EXHIBIT G.

2.2 MEETINGS.

2.2.1 SCHEDULE OF MEETINGS. The TAC shall establish a schedule of times for its meetings, taking into account, without limitation, the planning needs of the Technology Alliance Program. The TAC shall meet monthly unless otherwise agreed upon by the Parties. Meetings shall also be convened upon the determination of either or both of the Co-Chairs of the TAC by written notice (including notice via e-mail) thereof to their respective members that a meeting is required to discuss or resolve any matter or matters with respect to the Technology Alliance Program. Meetings shall alternate between the respective offices of the Parties or another mutually agreed upon location; PROVIDED, HOWEVER, that the Parties may mutually agree to meet by teleconference or video conference or may act by a written, memorandum signed by the Co-Chairs of the TAC.

2.2.2 QUORUM; VOTING; DECISIONS. At each meeting of the TAC, the participation of at least one member designated by each of the Parties shall constitute a quorum. Each TAC member shall have one vote on all matters before the TAC; PROVIDED, HOWEVER, that the member or members of each of the Parties present at any meeting shall have the authority to cast the votes of any of such Party's members who are absent from the meeting. All decisions of the TAC shall be made by majority vote of all of the members, with at least one representative from each of the Parties voting with the majority. Whenever any action by the TAC is called for hereunder during a time period in which a meeting is not scheduled, the Co-Chairs shall cause the TAC to take the action in the requested time period by calling a special meeting or by action without a formal meeting by written memorandum signed by both Co-Chairs of the TAC. Representatives of each Party or of its Affiliates, in addition to the members of the TAC, may attend meetings as non-voting observers at the invitation of either Party with prior notice to the other Party. In the event that the TAC is unable to resolve any matter before it, such matter shall be resolved as set forth in Section 11.3 hereof.

2.2.3 MINUTES. A secretary shall be appointed to keep accurate minutes of the deliberations of the TAC recording all proposed decisions and all actions recommended or taken. Drafts of such minutes shall be delivered to the Co-Chairs of the TAC within a reasonable period of time not to exceed five (5) days after a TAC meeting. Draft minutes shall be edited by the Parties and shall be issued in final form within a reasonable time not to exceed ten (10) days after the meeting only with their approval and agreement as evidenced by their signatures on the minutes.

2.2.4 EXPENSES. MBX and ADM Sub shall each bear all expenses of their respective TAC members related to their participation on the TAC and attendance at TAC meetings.

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2.3 DECISION-MAKING RESPONSIBILITIES. The TAC shall be solely responsible for making all decisions relating to planning and overseeing the execution of the Technology Alliance Program that are not specifically reserved to a Party hereunder. All such decisions shall be made in good faith with he objective, using Commercially Reasonable Efforts, of achieving the Goal.

ARTICLE 3
TECHNOLOGY ALLIANCE PROGRAM

3.1 GOAL OF TECHNOLOGY ALLIANCE PROGRAM. The goal of the Technology Alliance Program is to (i) produce PHA Cell Paste, first in a fermenter having a capacity of approximately * and then in a fermenter having a capacity of approximately *, in both cases, in a manner and with results that meet the applicable Fermentation Performance Parameters; (ii) demonstrate recovery of PHA Material in a manner and with results that meet the Recovery

Performance Parameters (the items listed in the foregoing "(i)" and "(ii)" collectively are the "Technical Aspects of the Goal"); and (iii) based upon the results of (i) and (ii) above, have ADM Sub develop and the TAC agree upon a completed master plan for Construction of the ADM Sub Manufacturing Facility, including without limitation, surveys, blueprints, and engineering studies, which master plan shall be organized into a detailed, multiphase process for undertaking and completing Construction of the ADM Sub Manufacturing Facility and which shall have a project budget with projected detailed expenditures provided for each phase of the Construction process, all of which shall be in form and substance, suitable for ADM Sub's management and board of directors to make a determination to approve the expenditures for the ADM Sub Manufacturing Facility as and to the extent required by ADM Sub's corporate governance polices and procedures (the "ADM Sub Construction Master Plan and Budget") (collectively the "Goal"). Successful completion of the Goal is intended to confirm the potential economics of producing PHA Material at commercial scale as part of a long-term commercial alliance.

3.2 CONDUCT OF TECHNOLOGY ALLIANCE PROGRAM. The Parties shall use Commercially Reasonable Efforts to perform their respective obligations under the Technology Alliance Program, in accordance with the provisions herein and the provisions set forth in the Technology Alliance Plan, including without limitation, the timelines for performance.

3.2.1 CERTAIN MUTUAL REPRESENTATIONS. The Parties hereby represent and warrant to each other as follows: (i) it shall use Commercially Reasonable Efforts to perform its obligations under the Technology Alliance Plan in accordance with high scientific and engineering principles and procedures, and that it shall perform such obligations in compliance in all material respects with all requirements of applicable laws, rules, and regulations, (ii) it shall use Commercially Reasonable Efforts to achieve the objectives of the Technology Alliance Program efficiently and expeditiously and (iii) it shall proceed diligently with the Technology Alliance Program using Commercially Reasonable Efforts, including allocating time, effort, equipment, and skilled personnel to attempt to complete the Technology Alliance Program and achieve the Goal successfully and promptly.

3.2.2 TECHNOLOGY TRANSFER. Promptly upon execution of this Agreement, but in mo event later than three (3) months from the Effective Date, MBX and ADM Sub shall use

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Commercially Reasonable Efforts to conduct a transfer of MBX Technology to ADM Sub: (i) as set forth in the Technology Alliance Plan and (ii) as and to the extent reasonably necessary to enable ADM Sub to produce PHA Cell Paste (the "Technology Transfer"). MBX and ADM Sub shall each devote Commercially Reasonable Efforts, including devoting personnel and other resources, to complete the Technology Transfer in accordance with the requirements, including without limitation the schedule set forth in the Technology Alliance Plan; provided, MBX shall have no obligation to transfer any Proprietary Materials or Technology that MBX does not Control as part of the Technology Transfer. ADM Sub acknowledges that some of the MBX Technology that will be transferred to ADM Sub is in the form of trade secrets. In an effort to ensure the maximum continued protection of MBX's rights in such trade secrets, and in keeping with Article 7 hereof ADM Sub covenants that it will provide access to the MBX Technology only to employees of ADM and ADM Sub who have a need to have access to such MBX Technology in order to complete the Technology Transfer and perform ADM Sub's obligations under the Technology Alliance Plan. MBX acknowledges that some of the ADM Sub Technology that may be transferred to MBX is in the form of trade secrets. In an effort to ensure e maximum continued protection of ADM Sub's rights in such trade secrets, and in keeping with Article 7 hereof, MBX covenants that it will provide access to the ADM Sub Technology only to employees of MBX who have a need to have access to such ADM Sub Technology in order to perform MBX's obligations under the Technology Alliance Plan.

3.2.3 FERMENTATION OPERATION. ADM Sub shall use Commercially Reasonable Efforts, including making available personnel, plant, equipment and other resources , to produce the PHA Cell Paste in the quantities, form and condition set forth in the Technology Alliance Plan. Such resources shall be made available for the Technology Alliance Program in the manner and to the extent set forth herein and in the Technology Alliance Plan, with the purpose of achieving the Goal. MBX shall have reasonable access to that portion, of the facilities at which such production operations are conducted as is reasonably necessary to observe and participate in such operations. MBX acknowledges that the personnel, plant, equipment and other resources utilized in producing the PHA Cell Paste will not be dedicated to such purpose solely, and ADM Sub will put such resources to other uses

during the Technology Alliance Program, in a manner consistent with ADM Sub's ability to perform its obligations as described herein and in the Technology Alliance Plan. At the request of either Party, the TAC will, within ten (10) days after such request, determine whether the Parties have, as of that date; successfully produced PHA Cell Paste, in a fomenter having a capacity of approximately *, in a manner and with results that meet the applicable Fermentation Performance Parameters.

3.2.4 RECOVERY OPERATION. MBX shall use Commercially Reasonable Efforts, including making available personnel, plant, equipment and other resources, to demonstrate recovery of PHA Material as set forth in the Technology Alliance Plan. Such resources shall be made available for the Technology Alliance Program in the manner and to the extent set forth herein and in the Technology Alliance Plan, with the purpose of achieving the Goal. ADM and ADM Sub shall have reasonable access to that portion of the MBX facilities, or facilities of third panics, at which such production operations are conducted as is reasonably necessary to observe and participate in such operations. ADM Sub acknowledges that the personnel, plant, equipment and other resources utilized to perform the recovery of PHA Material will not be dedicated to such purpose solely, and MBX will put such resources to other uses during the Technology Alliance Program, in a manner consistent with MBX's ability to perform its obligations as

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described herein and in the Technology Alliance Plan. At the request of either Party, the TAC will, within ten (10) days after such request, determine whether the Parties have, as of that date, successfully demonstrated the recovery of PHA Material in a manner and with results that meet the Recovery Performance Parameters.

3.2.5 ADM SUB CONSTRUCTION MASTER PLAN AND BUDGET. ADM Sub shall prepare the ADM Sub Construction Master Plan and Budget, with the assistance of MBX and in consultation with any Third Party Consultants as shall be approved by the TAC. After the completion of the ADM Sub Construction Master Plan and Budget, the TAC will promptly conduct a complete review of such document, and shall designate and approve those items or categories of costs and expenses provided in such documents as Construction Costs and shall indicate whether and why certain items or categories of costs and expenses do not qualify as Construction Costs, in whole or in part, and whether such costs and expenses could so qualify under other circumstances, for example, if more information were provided as the necessity and reasonableness of the particular costs and expenses or the features or facilities to which such costs and expenses relate. After such review and approval process is completed by the TAC, in the event ADM Sub desires to strike the Option, ADM Sub shall seek all approvals and authorizations required under its corporate governance policies and practices to authorize the Construction of the ADM Sub Manufacturing Facility including the authorization to expend the amounts provided for in the ADM Sub Construction Master Plan and Budget.

3.3 OUTPUT FROM TECHNOLOGY ALLIANCE PROGRAM. ADM Sub will use Commercially Reasonable Efforts to produce PHA Cell Paste in such amounts as result from the operations set forth in the Technology Alliance Plan (the "Technology Alliance Output") and such additional amounts as the Parties may agree to in writing (the "Marketing Material") for use by MBX in developing the market for PHA Material. The Technology Alliance Output and the Marketing Material will be made available by ADM Sub to MBX as set forth in this Section 3.3.

3.3.1 ANALYSIS OF TECHNOLOGY ALLIANCE OUTPUT. MBX will use the Technology Alliance Output to demonstrate recovery of PHA Material in accordance with Section 3.2.4 and the Technology Alliance Plan. Further, the Technology Alliance Output will be used by the Parties to perform such evaluation and analysis as is necessary or useful in determining whether the Parties have achieved the Goal. Without limiting the foregoing statement, the Technology Alliance Output will be evaluated and analyzed by the Parties, in accordance with the procedures and methods set forth in the Technology Alliance Plan, to determine whether the Technology Alliance Output meets the Fermentation Performance Parameters and the Recovery Performance Parameters.

3.3.2 PURCHASE OF TECHNOLOGY ALLIANCE OUTPUT BY MBX. MBX shall have the right, but not the obligation, to purchase the Technology Alliance Output from ADM Sub at a price of * of PHA Material contained within the PHA Cell Paste, on a one hundred percent (100%) purity basis, and the right and obligation to purchase the Marketing Material manufactured in accordance with the applicable agreement between the

Parties, from ADM Sub, at ADM Sub's Manufacturing Cost, F.O.B. Decatur, Illinois. MBX may exercise this purchase option at any time, and from time-to-time, during the Technology Alliance Program and up to thirty (30) days after the expiration or termination of the Technology Alliance Program, by written notice to ADM Sub, stating its desire to purchase, the quantity to be purchased (up to the

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total amount that is then available) and shipping and delivery instructions. ADM Sub shall invoice MBX for amounts so purchased no sooner than at the time of delivery and the purchase price for amounts ordered and delivered in accordance herewith shall be payable by MBX within thirty (30) days of receipt of an invoice from ADM Sub by wire transfer of immediately available fluids to an account in the United States designated by ADM Sub. Technology Alliance Output and Marketing Material purchased hereunder shall be purchased "as is," without warranty of any kind other than that the Technology Alliance Output and Marketing Material shall have been stored and handled, from the time of production until the delivery to MBX, in accordance with the requirements of the Technology Alliance Plan or as otherwise agreed by the Parties. Technology Alliance Output and Marketing Material purchased by MBX shall be used by MBX for performing its obligations pursuant to this Agreement and for market development activities benefiting the Parties and the potential Commercial Alliance between them. Technology Alliance Output that is not purchased by MBX shall be used by ADM Sub solely for internal research and development purposes, or if not soused, ADM Sub shall either store (for later sale to MBX or the Joint Sales Company or for later use by ADM Sub solely for internal research purposes) or dispose of the unused Technology Alliance Output, at ADM Sub's option.

3.4 REPORTING REQUIREMENTS. Within ten (10) days after the end of each month during the term of the Technology Alliance Program, or as otherwise agreed to by the Parties, the Parties shall provide each other with a written progress report which shall describe the activities that have been performed to date in connection with the Technology Alliance Program, including without limitation, an evaluation of the work performed in relation to the Goal of the Technology Alliance Program, and will provide such other information as may be required by the Technology Alliance Plan or reasonably requested by MBX or ADM Sub.

3.5 RECORDS. ADM Sub and MBX shall maintain records with respect to the Technology Alliance Program in sufficient detail and in a good scientific manner appropriate to support patent filings, which shall be complete and accurate and shall fully and properly reflect all work done and results achieved in the performance of the Technology Alliance Program. All such records shall be retained for at least five (5) years after the termination of this Agreement, or for such longer period as may be required by applicable law. Each of ADM Sub and MBX shall have the right, during normal business hours and upon reasonable notice, to inspect and copy any such records that are maintained hereunder.

ARTICLE 4
INTELLECTUAL PROPERTY

4.1 OWNERSHIP.

4.1.1 BACKGROUND TECHNOLOGY, PROPRIETARY MATERIALS. Subject to the rights and licenses granted herein, ADM Sub shall own all right, title and interest in and to any: (i) ADM Sub Background Technology, (ii) ADM Sub Program Technology and (iii) ADM Sub Proprietary Materials. Subject to the rights and licenses granted herein, MBX shall own all right, title and interest in and to any: (x) MBX Background Technology, (y) MBX Program Technology and (z) MBX Proprietary Materials.

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4.1.2 JOINT OWNERSHIP. MBX and ADM Sub shall jointly own all Joint Program Technology. ADM Sub hereby grants to MBX a perpetual, *, exclusive, fully-sublicenseable license to ADM Sub's rights in Joint Program Technology for the research, development, manufacture, use, sale and importation of PHA Related Material produced via Plants. MBX hereby grants to ADM Sub a perpetual, *, exclusive, fully-sublicenseable license to MBX's rights in Joint Program Technology for use in all fields that are part of ADM's and its Affiliates' commercial activities at any time during the tern of this Technology Alliance Agreement, but excluding: (i) uses that are within the Field, (ii) uses that are within the term "Field of Use" as that term is defined in the License Agreement by and between MBX and Tepha, Inc. dated October 1, 1999 and (iii) any and all uses of PHA Related Material

produced via Plants. Subject to the rights, licenses and obligations set forth herein, MBX and ADM Sub hereby agree that they shall each have the right to assign, sell, license or otherwise convey their rights in the Joint Program Technology without notice to or consent of the other Party and without any obligation to share the proceeds of such activity with the other Party, or otherwise to account to the other Party in connection with such activities. In all other respects, the rights of the Parties as joint owners shall be determined by the laws of the United States of America and the State of Delaware.

4.1.3 DISCLOSURE. MBX and ADM Sub shall each promptly disclose to the other, in writing, the making, conception or reduction to practice of any Program Technology.

4.2 LICENSE GRANTS.

4.2.1 LICENSE GRANTS BY MBX. Subject to the terms and conditions act forth herein, MBX hereby grants to ADM Sub a *, non-exclusive license, without the right to assign or sublicense, under MBX's right, title and interest in and to the MBX Technology and the MBX Patent Rights, solely to perform its obligations under the Technology Alliance Plan during the term of this Agreement. ADM Sub acknowledges that certain of the MBX Patent Rights and MSX Technology are Controlled by MBX pursuant and subject to that certain License Agreement dated July 15, 1993 by and between MBX and Massachusetts Institute of Technology as amended, the MIT License"). The license granted herein to ADM Sub is subject to certain rights retained by MIT in the MIT License and ADM Sub further agrees that the obligations to MIT set forth in Articles 2, 5, 7, 8, 9, 10, 12, 13 and 15 (copies of said articles am attached hereto as EXHIBIT H) are binding upon ADM Sub as if it were a Party to the MIT License.

4.2.2 GRANTS BY ADM SUB. Subject to the terms and conditions set forth herein, ADM Sub hereby grants to MBX a *, non-exclusive license, without the right to assign or sublicense, under ADM Sub's right, title and interest in and to the ADM Sub Technology and the ADM Sub Patent Rights, solely to perform its obligations under the Technology Alliance Plan during the term of this Agreement.

4.3 GRANT OF OPTION. MBX hereby grants to ADM Sub the might and option to enter into a commercial alliance for the further research, development, manufacture, use, sale and importation of the PHA Material and PHA Formulations on the terms and conditions set forth in the Commercial Alliance Agreements (the "Option"). The Option shall be exercisable by ADM Sub as follows: (i) at any time after the Technical Aspects of the Goal have been achieved and until thirty (30) days after the expiration of the term of this Agreement, by written notice to

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MBX or (ii) at any time after the Fermentation Performance Parameters applicable to fermentation in a * fermenter have been met and until thirty (30) days after the expiration of the term of this Agreement, by written notice to MBX; PROVIDED, HOWEVER, that, in either case, the Option shall not be exercisable if and for so long as ADM Sub is in breach of this Agreement. Following the exercise of the Option, the Parties shall promptly execute and deliver the Commercial Alliance Agreements in accordance with this Agreement.

4.4 NO IMPLIED RIGHTS. The Parties hereby agree and acknowledge that no rights or licenses under their respective intellectual property rights are granted hereunder, by implication, estoppel or otherwise, by either of them, except as expressly set forth in Section 4.1, Section 4.2 and Section 4.3.

4.5 REPRESENTATIONS AND WARRANTIES.

4.5.1 MBX REPRESENTATIONS. Except as otherwise disclosed on Schedule 4.5.1 attached hereto and incorporated herein by reference, MBX represents and warrants, as of the Effective Date, that: *. MBX DOES NOT MAKE ANY OTHER REPRESENTATION OR WARRANTY WHATSOEVER CONCERNING THE MBX PATENT RIGHTS, THE MBX TECHNOLOGY OR ITS RIGHTS THEREIN. MBX HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

4.5.2 ADM SUB REPRESENTATIONS. Except as otherwise disclosed on Schedule 4.5.2 attached hereto and incorporated herein by reference, ADM Sub represents and warrants, as of the Effective Date, that: *. ADM SUB DOES NOT MAKE ANY OTHER REPRESENTATION OR WARRANTY WHATSOEVER CONCERNING THE ADM SUB PATENT RIGHTS, THE ADM SUB TECHNOLOGY OR ITS RIGHTS THEREIN. ADM SUB HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR

BELIED, INCLUDING BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

ARTICLE 5
PAYMENTS

5.1 PAYMENTS. Within ten (10) days after the Effective Date, ADM Sub shall pay to MBX the amount of * as a non-refundable; non-creditable upfront payment. Within ten (10) days following the TAC's determination that (i) the production of PHA Cell Paste in a fermenter having a capacity of approximately * was in a manner and with results that met the applicable Fermentation Performance Parameters, and (ii) the recovery of PHA Material was in a manner and with results that met the Recovery Performance Parameters, ADM Sub shall pay to MBX the amount of * as a non refundable, non-creditable milestone payment. Within ten (10) days following the first to occur of: (i) the achievement of the Goal and (ii) the exercise of the Option by ADM Sub, ADM Sub shall pay to MBX the amount of * as a non refundable, non-creditable milestone payment. Anything herein to the contrary notwithstanding, in the event that ADM Sub desires to exercise the Option in accordance with Section 4.3, the above-described upfront

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payment and the two (2) milestone payments, to the extent not already paid, shall be due and payable in full as a pre-condition to the exercise of the Option. Amounts due under this Section 5.1 shall be payable by wire transfer of immediately available funds to an MBX bank account in accordance with instructions to be provided to ADM Sub by MBX.

5.2 OTHER EXPENSES. Except as provided in Section 5.1, each Party shall bear its own costs and expenses incurred in performing under this Agreement.

ARTICLE 6
EXCLUSIVITY

6.1 EXCLUSIVITY. During the term of this Agreement, and for a period of thirty (30) days thereafter, *

ARTICLE 7
TREATMENT OF CONFIDENTIAL INFORMATION; PUBLICITY; NON-SOLICITATION

7.1 CONFIDENTIALITY OBLIGATIONS. MBX and ADM Sub each recognize that the other Parties' Confidential Information and Proprietary Materials constitute highly valuable and proprietary confidential information. Each of MBX and ADM Sub agrees that it will keep confidential, and will cause its employees, consultants, and Affiliates to keep confidential, all Confidential Information and Proprietary Materials of the other Parties. The Party and their respective employees, consultants or Affiliates, shall not use any Confidential Information or Proprietary Materials of any other Party for any purpose whatsoever except as expressly permitted in this Agreement. MBX acknowledges that the corn costs that constitute a portion of the Manufacturing Cost shall constitute ADM Sub Confidential Information.

7.2 LIMITED DISCLOSURE. MBX and ADM Sub each agree that any disclosure of any other Party's Confidential Information or any transfer of any other Party's Proprietary Materials to any officer or employee of any other Party or any of its Affiliates shall be made only if and to the extent necessary to carry out its rights and responsibilities under this Agreement and shall be limited to the maximum extent possible consistent with such rights and responsibilities. MBX and ADM Sub each further agree that any disclosure of another Party's Confidential Information or any transfer of another Party's Proprietary Materials as permitted by the preceding sentence shall only be made to such of the recipient Party's officers, employees aid Affiliates who are bound by written confidentiality obligations to maintain the confidentiality thereof and not to use such Confidential Information or Proprietary Materials except as expressly permitted by this Agreement. MBX and ADM Sub each further agree not to disclose or transfer any other Party's Confidential information or Proprietary Materials to any third parties under any circumstance without the prior written approval from the relevant other Party (such approval not to be unreasonably withheld), except as otherwise required by law, or except as otherwise expressly permitted by this Agreement. Each Party shall take such action, and shall cause its Affiliates to take such action, to preserve the confidentiality of the other Parties' Confidential Information and Proprietary Materials as it would customarily take to preserve the confidentiality of its own Confidential Information and Proprietary Materials, and in no event, less than reasonable care.

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Each Party, upon the request of any other Party, will return all the Proprietary Information and Confidential Materials disclosed or transferred to it by such other Party pursuant to this Agreement which does not constitute Joint Program Technology, including all copies and extracts of documents and all manifestations in whatever form, within two (2) months of the request or, within two (2) weeks of the termination or expiration of this Agreement; PROVIDED, HOWEVER, that a Party may retain Confidential Information, and Proprietary Materials of another Party relating to any license which survives such termination and one copy of all other Confidential Information may be retained in its legal files solely for the purpose of monitoring compliance with this Article 7.

7.3 EMPLOYEES AND CONSULTANTS. MBX and ADM Sub each hereby represent that all of its employees, and any consultants to such Party or its Affiliates, participating in the activities of the Technology Alliance Program who shall have access to the Confidential Information or Proprietary Materials of the other Party are bound by written obligations to maintain such information in confidence and not to use such information except as expressly permitted herein mid to assign any inventions or discoveries made in connection with such activities to MBX or ADM Sub as applicable. Each Party agrees to be held responsible for the confidentiality obligations to which its employees and consultants (and those of its Affiliates) are obligated.

7.4 PUBLICITY. Neither Party may publicly disclose the existence or terms of this Agreement without the prior written consent of the other Party; PROVIDED, HOWEVER, that either Party may make such a disclosure: (a) to the extent required by law (including the fling of a redacted copy of the Agreement as an exhibit to a legally required filing) or by the requirements of any nationally recognized securities exchange, quotation system or over-the-counter market on which such Party has its securities listed or traded, and (b) to any investors (including without limitation, entities interested in acquiring the stock or assets of such Party or merging with or into such Party), prospective investors, lenders, other potential financing sources, prospective customers and prospective strategic marketing partners who are obligated to keep such information confidential. In the event that such disclosure is required as aforesaid, the disclosing Party shall make Commercially Reasonable Efforts to provide the other Party with reasonable notice prior to such disclosure and to coordinate with the other Party with respect to the wording and timing of any such disclosure. The Parties, prior to the execution of this Agreement, will mutually agree on the wording of a press release publicizing the Technology Alliance which shall be attached hereto as EXHIBIT I. Once such press release or any other written statement is approved for disclosure by both Parties, either Party may make subsequent public disclosure of the contents of such statement, but no more than the contents of such statement, without the further approval of the other Party.

7.5 PROHIBITION ON SOLICITATION. Neither Party nor its Affiliates shall, during the period commencing on the Effective Date and continuing until the expiration or termination of this Agreement and * thereafter, specifically solicit any person who is employed by the other Party or its Affiliates and who was involved in the Technology Alliance Program during the term of this Agreement, whether such person is solicited to be hired as an employee or consultant, unless authorized in writing by the other Party. The Parties acknowledge that generally listing a position for hire in a newspaper, trade journal or similar publication shall not constitute a specific solicitation in violation of the terms of this provision. The Parties also acknowledge that specifically soliciting any person who was formerly employed by the other Party or its Affiliates

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is not in violation of the terms of this provision. The Parties further acknowledge for the avoidance of doubt that this Section only applies to those persons that remain employees of a Party and not to former employees of a Party.

7.6 TERM. The obligations and restrictions set forth in this Article 7 shall survive the termination or expiration of this Agreement for a period of twenty (20) years.

ARTICLE 8
TERM AND TERMINATION

8.1 TERM. This Agreement shall commence as of the Effective Date and shall expire upon the first to occur of (i) fifteen (15) months following the completion of the initial fermentation run by ADM Sub in a fermenter having a capacity of approximately *, (ii) eighteen (18) months following the completion of MBX's obligations in connection with the Technology Transfer as specified

under the Technology Alliance Plan, (iii) the second anniversary of the Effective Date, unless terminated in accordance with this Article 8 prior to such date, and (iv) the execution of the Commercial Alliance Agreement.

8.2 TERMINATION BY EITHER PARTY. This Agreement may be terminated at any time by either Party in the event that the other Party materially defaults on any material obligation hereunder or materially breaches any material term of this Agreement to be performed or observed: (a) by giving one (1) month prior written notice to the defaulting Party in the case of a breach of any payment term of this Agreement, and (b) by giving two (2) months prior written notice to the defaulting Party in the case of any other breach; PROVIDED, HOWEVER, that in the case of a default or breach capable of being cured, if said defaulting Party shall cure the said default or breach within such notice period after said notice shall have been given, then said notice shall not be effective and this Agreement shall continue in full force and effect

8.3 AT WILL TERMINATION BY ADM SUB. ADM Sub shall have the right to terminate this Agreement at any time upon not less than one (1) month prior written notice to MBX.

8.4 CONSEQUENCES OF TERMINATION OR EXPIRATION; GRANT OF LICENSES. Upon the termination or expiration of the Agreement, the following shall occur:

8.4.1 CONSEQUENCES OF TERMINATION OR EXPIRATION.

(a) MBX shall immediately cease using, and shall promptly return to ADM Sub, all ADM Sub Technology, except to the extent MBX has a license to practice such Technology under Section 8.4;

(b) ADM Sub shall immediately cease using, and shall promptly return to MBX all MBX Technology, except to the extent ADM Sub has a license to practice such Technology under Section 8.4;

(c) the license granted to ADM Sub pursuant to Section 4.2.1 shall immediately terminate;

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(d) the license granted to MBX pursuant to Section 4.2.2 shall immediately terminate;

(e) each Party shall promptly pay to the other any amounts due and payable hereunder as of the effective date of termination or expiration; and

(f) subject to those rights and obligations of the Parties that survive termination or expiration by their terms or pursuant to Section 8.5, this Agreement shall terminate and be of no further force or effect.

8.4.2 RIGHTS UPON ADM SUB TERMINATION.

(a) In the event ADM Sub terminates this Agreement pursuant to Section 8.3, or ADM Sub does not Exercise the Option after the Technical Aspects of the Goal have been achieved, then ADM Sub shall and hereby does grant to MINX a fully-sublicenseable, *, perpetual, irrevocable, non-exclusive license under all intellectual property rights Controlled by ADM Sub and claiming or covering Program Technology, to research, develop, manufacture, use, sell and import PHA-Related Material, produced using any means or methods, for any and all uses.

(b) In the event ADM Sub terminates this Agreement pursuant to Section 8.2, then MBX shall and hereby does grant to ADM Sub a fully-sublicenseable, *, perpetual, irrevocable (unless the terms of the license are breached), non-exclusive license under all intellectual property rights Controlled by MBX and claiming or covering Program Technology and MBX Background Technology to research, develop, manufacture, use, sell and import PHA Material and PHA Formulations for use in the Field. The foregoing license shall be limited such that ADM Sub shall be permitted to make a maximum of * of PHA Materials during each consecutive period of twelve (12) months during the term of the license on a * basis and ADM Sub shall have the right to make up to an additional * of PHA Material during each consecutive period of twelve (12) months during the term of the license subject to

payment to MBX of a royalty (i) during the Royalty Term equal to: (y) * on all sales or other conveyances of PHA Patented Material (including, without limitation, PHA Material that is contained within PHA Formulations), on a one hundred percent (100%) purity basis; and (z) * on all sales or other conveyances of PHA Know How Material (including, without limitation,

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PHA Material that is contained within PHA Formulations), on a one hundred percent (100%) purity basis; and (ii) during the Supplemental Royalty Term equal to * on all sales or other conveyances of PHA Supplemental Know How Material (including, without limitation, PHA Material that is contained within PHA Formulations), on a one hundred percent (100%) purity basis. Provided, however, that any such royalty shall be reduced by the amount of royalties payable to any Third Party under a license required to obtain freedom to practice the MBX Technology and/or MBX Patent Rights for the manufacture, use or sale of PHA Material within the Field provided that MBX breached an obligation under Section 4.5.1 to disclose: (i) the existence of such Third Party's intellectual property rights in such Technology, or (ii) claims by such Third Party that any of the MBX Patent Rights are invalid or unenforceable, or that the practice of any of the MBX Patent Rights would constitute an infringement or misappropriation of such Third Party's intellectual property rights (such royalty reduction right is "Third Party IP Royalty Offset"). Such royalty shall be payable within thirty (30) days following the end of each calendar quarter for sales or conveyances that occur during such calendar quarter. Amounts due under this Section 8.4.2(b) shall be payable by wire transfer of immediately available funds to an MBX bank account in accordance with instructions to be provided to ADM Sub by MBX. Any amounts that are not paid when due hereunder shall accrue interest at the rate of four percent (4%) per annum in excess of the one year London Interbank Offered Rate (LIBOR) then most recently published in THE WALL STREET JOURNAL. The right to demand and receive the interest provided hereunder shall be in addition to any other rights available to MBX hereunder or at law. ADM Sub shall maintain records with respect to the sale or conveyance of PHA Material under this license in sufficient detail to enable MBX to verify the accuracy of the royalty payments made hereunder by ADM Sub. Such records shall be retained for at least five (5) years after the relevant (late of sale or conveyance. MBX shall have the right, during normal business hours and upon reasonable notice, to have an independent third party accounting firm (subject to a mutually agreeable confidentiality agreement) inspect and copy any such records that are maintained in accordance with this Section 8.4.2(b). ADM Sub may terminate this license at any time without any further obligation by providing MBX with written notice thereof. In addition, in the event ADM Sub terminates this Agreement pursuant to Section 8.2, MBX shall promptly destroy any derivatives and mutated forms constituting MBX Proprietary Materials invented by ADM Sub, and provide ADM Sub with a certification signed by an officer of MBX that MBX has complied with this provision.

8.4.3 RIGHTS UPON MBX TERMINATION. In the event MBX terminates this Agreement pursuant to Section 8.2, then ADM Sub shall and hereby does grant to MBX: (i) a fully-sublicenseable, *, perpetual, irrevocable, exclusive license under all intellectual property

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rights Controlled by ADM Sub and claiming or covering Program Technology, to research, develop, manufacture, use, sell and import PHA Related Material, produced using any means or methods, for any and all uses, and (ii) a fully-sublicenseable, *, perpetual, irrevocable, non-exclusive license under all ADM Sub Background Technology, to research, develop, manufacture, use, sell and import PHA-Related Material, produced using any means or methods, for any and all uses.

8.4.4 RIGHTS UPON BANKRUPTCY.

(a) In the event ADM Sub files for protection under Chapter 11 of the U.S. Bankruptcy Code, and ADM Sub, directly or indirectly in connection with such proceedings, rejects this Agreement as an executory contract (or on similar grounds), then ADM Sub shall and hereby does grant to MBX: (i) a fully-sublicenseable, *, perpetual, irrevocable, exclusive license under all intellectual property rights Controlled by ADM Sub and claiming or covering Program Technology, to research, develop, manufacture, use, sell and import PHA-Related Material, produced using any means or methods, for any and all uses, and (ii) a fully-sublicenseable, *, perpetual, irrevocable, non exclusive license under all ADM Sub Background Technology, to research, develop, manufacture, use, sell and import PHA-Related Material, produced using any means or methods, for any and all uses.

(b) In the event MBX files for protection under Chapter 11 of the U.S. Bankruptcy Code, and MBX, directly or indirectly in connection with such proceedings, rejects this Agreement as an executory contract (or on similar grounds), then MBX shall and hereby does grant to ADM Sub a fully-sublicenseable, *, perpetual, irrevocable (unless the terms of the license are breached), nonexclusive license under all intellectual property rights Controlled by MBX and claiming or covering Program Technology and MBX Background Technology to research, develop, manufacture, use, sell and import PHA Material and PHA Formulations for use in the Field. The foregoing license shall be limited such that ADM Sub shall be permitted to make a maximum of * of PHA Materials during each consecutive period of twelve (12) months during the term of the license on a * basis and ADM Sub shall have the right to make up to an additional * of PHA Material during each consecutive period of twelve (12) months during the term of the license subject to payment to MBX of a royalty (i) during the Royalty Term equal to: (y) * on all sales or other conveyances of PHA Patented Material (including, without limitation, PHA Material that is contained within PHA Formulations), on a one hundred

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percent (100%) purity basis; and (z) * on all sale or other conveyances of PDA Know-How Material (including, without limitation, PHA Material that is contained within PHA Formulations), on a one hundred percent (100%) purity basis; and (ii) during the Supplemental Royalty Term equal to * on all sales or other conveyances of PHA Supplemental Know-How Material (including, without limitation, PHA Material that is contained within PHA Formulations), on a one hundred percent (100%) purity basis. Provided, however, that any such royalty shall be subject to Third Party IP Royalty Offset. Such royalty shall be payable within thirty (30) days following the end of each calendar quarter for sales or conveyances that occur during such calendar quarter. Amounts due under this Section 8.4.4(b) shall be payable by wire transfer of immediately available funds to an MBX bank account in accordance with instructions to be provided to ADM Sub by MBX. Any amounts that are not paid when due hereunder shall accrue interest at the rate of four percent (4%) per annum in excess of the one year London Interbank Offered Rate (LIBOR) then most recently published in THE WALL STREET JOURNAL. The right to demand and receive the interest provided hereunder shall be in addition to any other rights available to MBX hereunder or at law. ADM Sub shall maintain records with respect to the sale or conveyance of PHA Material under this license in sufficient detail to enable MBX to verify the accuracy of the royalty payments made hereunder by ADM Sub. Such records shall be retained for at least five (5) years after the relevant date of sale or conveyance. MBX shall have the right, during normal business hours and upon reasonable notice, to have an independent third party accounting firm (subject to a mutually agreeable confidentiality agreement) inspect and copy any such records that are maintained in accordance with this Section 8.4.4(b). ADM Sub may terminate this license at any time without any further obligation by providing MBX with written notice thereof.

8.5 SURVIVING PROVISIONS; RESERVATION OF RIGHTS. Termination or expiration of this Agreement for any reason shall be without prejudice to any rights and obligations of the Parties that have accrued as of the Effective Date of termination and:

(a) the rights and obligations of the Parties provided in Section 8.4, and Articles 1, 4, 6, 7, 9, 10 and 11 and any other provision which would reasonably be expected to survive termination in accordance with the terms of this Agreement, all of which shall survive such termination for the period of time set forth in each such provision, or indefinitely if no such time is specified; and

(b) any other rights or remedies provided at law or equity which either Party may otherwise have against the other.

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ARTICLE 9
PATENT MATTERS

9.1 PATENT FILING, PROSECUTION AND MAINTENANCE.

9.1.1 ADM SUB PATENT RIGHTS. ADM Sub shall have the sole right and authority to file, prosecute and maintain the ADM Sub Patent Rights during the term of this Agreement at its own expense and using patent counsel of its own choosing. ADM Sub represents that it will continue to file, prosecute and maintain the ADM-Sub Patent Rights in accordance with reasonable commercial practices during the term of this Agreement.

9.1.2 MBX PATENT RIGHTS. MBX shall have the sole right and authority to file, prosecute and maintain the MBX Patent Rights during the term at its own expense and using patent counsel of its own choosing. MBX represents that it will continue to file, prosecute and maintain the MBX Patent Rights in accordance with reasonable commercial practices during the term of this Agreement.

9.1.3 ABANDONMENT. If either Party decides to withdraw from the continued prosecution of any Patent Rights on Technology that is at that time subject to a license hereunder, such Party shall so inform the other Party at least thirty (30) days prior to the effective date of such decision and the other Party shall have the right, through patent attorneys or agents of its choice, to assume responsibility for the continued prosecution of such Patent Rights. Promptly after the effective date of the decision to withdraw, the withdrawing Party shall assign its right, title and interest in and to such Patent Rights to the other Party. Notwithstanding such assignment, such Patent Rights will continue to be subject to any licenses granted herein to the extent necessary in carrying out the Commercial Alliance.

9.1.4 JOINT PROGRAM TECHNOLOGY. The Parties will file, prosecute and maintain Patent Rights claiming Joint Program Technology in accordance with this Section 9.1.4 with the primary goal of maximizing the commercial potential of the PHA Material in a commercially reasonable manner. The Parties, sharing expenses equally and acting through patent attorneys or agents agreed upon by the Parties, shall prepare, file, prosecute and maintain all Patent Rights relating to Joint Program Technology. If either Party decides to withdraw from the continued prosecution of any Patent Rights on Joint Program Technology, such Party shall so inform the other Party at least thirty (30) days prior to the effective date of such decision and the other Party shall have the right, through patent attorneys or agents of its choice, to assume responsibility for the continued prosecution of such Patent Rights. Promptly after the effective date of the decision to withdraw, the withdrawing Party shall assign its right, title and interest in and to such Patent Rights to the other Party. Notwithstanding such assignment, such Patent Rights will continue to be subject to the licenses granted herein to the extent applicable.

9.2 INFRINGEMENT AND DEFENSE.

9.2.1 ACTUAL OR THREATENED INFRINGEMENT. In the event either Party becomes aware of any possible infringement or unauthorized possession, knowledge or use of any Technology, which is the subject matter of this Agreement, in the Field (collectively, an "Infringement"), that Party shall promptly notify the other Party and provide it with available

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details. ADM Sub hereby reserves the exclusive right (but not obligation) to take whatever action it deems appropriate to prevent or terminate any third party infringement of ADM Sub Patent Rights claiming the ADM Sub Technology, at ADM Sub's cost. MBX hereby reserves the exclusive right (but not obligation) to take whatever action it deems appropriate to prevent or terminate any third party infringement of MBX Patent Rights claiming the MBX Technology, at MBX's cost. Notwithstanding the foregoing, during the term, if either Party (the "Defending Party") decides to take any action to prevent or terminate any third party infringement of its Patent Rights within the Field, it shall first give notice to the other Party (the "Neutral Party") and, if the Neutral Party can produce a written legal opinion of an independent patent attorney concluding that there is a reasonable likelihood that such third party could, in good faith, in connection with such action, allege that a claim or claims within Patent Rights Controlled by the Neutral Party are invalid or unenforceable, then the Defending Party shall not take such action against such third party without the prior, written consent of the Neutral Party. The Parties, sharing expenses equally and acting through patent attorneys or agents agreed upon by the Parties, shall take whatever action they shall agree upon to prevent or terminate any third party infringement of Patent Rights relating to Joint Program Technology, PROVIDED, HOWEVER, that if the Parties cannot agree, MBX shall have the right to make the final determination with respect to third party infringement within the Field. In all cases, all decisions by a Party pursuant to this Section 9.2 shall be made in good faith and in the best interest of the Technology Alliance Program.

9.2.2 DEFENSE OF CLAIMS. In the event that any action, suit or proceeding is brought against either Party based on its actions in performance of the Technology Alliance Program and alleging the infringement of the Technology or intellectual property rights of a third party, the Parties shall cooperate with each other in the defense of any such suit, action or proceeding. The Parties will give each other prompt written notice of the commencement of any such suit, action or proceeding or claim of infringement and will furnish each other with a copy of each communication relating to the alleged infringement. Each Party shall cooperate in the defense of such actions. If as a consequence of such action, suit or proceeding by a third party, a prohibition, restriction or other condition is imposed upon one or both of the Parties, the Parties shall examine and discuss in good faith the consequences of such prohibition or restriction or other conditions on this Agreement and on possible modifications hereto.

ARTICLE 10
INDEMNIFICATION

10.1 INDEMNIFICATION BY MBX. During the course of, and upon and after termination of this Agreement for any reason whatsoever, MBX and its Affiliates shall indemnify, defend and hold ADM Sub, its Affiliates and their respective directors, officers and employees (collectively, "ADM Sub Indemnitees") harmless against any claims (including without limitation claims for product liability, personal injury or death, or property damage), liability, damage, loss, cost or expense (including reasonable attorneys' fees) incurred by any of them, to the extent resulting from: *.

10.2 INDEMNIFICATION BY ADM SUB. During the course of, and upon and after termination of this Agreement for any reason whatsoever, ADM Sub and its Affiliates shall

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indemnify, defend and hold MBX, its Affiliates and their respective directors, officers and employees (collectively, "MBX Indemnitees") harmless against any claims (including without limitation claims for product liability, personal injury or death, or property damage), liability, damage, loss, cost or expense (including reasonable attorneys' fees) incurred by any of them, to the extent resulting from: *.

10.3 CONDITIONS TO INDEMNIFICATION. A Party seeking indemnification under this Article 10 (the "Indemnified Party') shall give prompt notice of the claim to the other Party (the "Indemnifying Party) and, provided that the Indemnifying Party is not contesting the indemnity obligation, shall permit the Indemnifying Party to control any litigation relating to such claim and disposition of any such claim, provided that the Indemnifying Party shall act reasonably and in good faith with respect to all matters relating to the settlement or disposition of any claim as the settlement or disposition relates to Parties being indemnified under this Article 10 and provided, further, that the Indemnifying

Party shall not settle or otherwise resolve any claim without prior notice to the Indemnified Party and the consent of the Indemnified Party (which consent shall not be unreasonably withheld, conditioned or delayed) if such settlement involves anything other than the payment of money by the Indemnifying Party. The Indemnified Party shall cooperate with the Indemnifying Party in its defense of any claim for which indemnification is sought under this Article 10 and shall have the right to be present hi person or through counsel at all legal proceedings giving rise to the right of indemnification.

ARTICLE 11
MISCELLANEOUS

11.1 NO ASSIGNMENT. No Party shall sell, transfer or permit any transfer of, in whole or in part, this Agreement without prior written consent of the other Parties, which consent may be withheld for any reason. The merger or acquisition of MBX by, with or into a third party shall not be deemed to effect an assignment of this Agreement by MBX and this Agreement shall be binding upon and inure to the benefit of such third party, or new entity, in the case of a merger or similar transaction in which MBX does not continue as the same corporate entity and shall continue to bind and inure to the benefit of MBX in the case of an acquisition or similar transaction in which MBX survives as the same corporate entity. ADM Sub shall not enter into any merger, acquisition or similar transaction without the prior, written consent of MBX. Nothing herein shall restrict ADM from entering into a merger or acquisition of ADM by, with or into a third party and no such transaction shall he deemed to effect an assignment of this Agreement by ADM Sub and this Agreement shall be binding upon and inure to the benefit of such third party, or new entity, in the case of a merger or similar transaction in which ADM does not continue as the same corporate entity and shall continue to bind and inure to the benefit of ADM Sub in the case of an acquisition or similar transaction in which ADM survives as a the same corporate entity. Any purported assignment or transfer in violation of this provision shall be null and void. *

11.2 SUCCESSORS. In the event of a permitted assignment, this Agreement shall be binding upon, and inure to the benefit of, all the Parties and their respective successors and legal assigns.

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11.3 DISPUTE RESOLUTION. Any dispute or claim arising out of or relating to this Agreement, or breach thereof shall be resolved in accordance with this Section 11.3. During the course of resolving any such dispute, the Parties shall continue to perform their obligations hereunder (including by making payment of the undisputed portion of any payment obligation that is the subject of a dispute hereunder or thereunder). Notwithstanding the foregoing, the obligation of the Parties to continue to perform hereunder during the resolution of disputes shall not require a Party to perform obligations (other than any undisputed portion of any payment obligations) where such performance is rendered impossible, or would otherwise not maintain or increase the likelihood that the Parties will achieve the purpose and Goal of the Technology Alliance, because of circumstances created by or directly related to the dispute itself.

11.3.1 GOOD FAITH CONSULTATION. In the event of a dispute between the Parties, the Parties shall attempt in good faith to settle such dispute through mutual consultation. If, after such consultation, the dispute cannot be resolved, the Parties shall wait for not less than sixty (60) days after the dispute arises and at the end of such period meet for a second consultation. If the dispute is not resolved after the second consultation, the matter shall be referred to the Senior Vice President (Corn Processing and Food Specialties) of ADM Sub and the Chief Executive Officer of MBX (together, the "Senior Executives") for resolution in accordance with Section 11.3.2.

11.3.2 SENIOR EXECUTIVES. The Senior Executives shall diligently attempt to resolve the dispute, including, if they deem it necessary, meeting directly in order to provide full consideration of the dispute. If the Senior Executives are unable to resolve the dispute within sixty (60) additional days after the second consultation then the dispute shall be referred to arbitration.

11.3.3 ARBITRATION. Any arbitration to be conducted hereunder shall be brought and conducted in accordance with the following provisions:

(1) The arbitration shall be held in Chicago, Illinois if initiated by MBX and in Boston, Massachusetts if initiated by ADM Sub.

(2) The arbitration shall be conducted by three (3) arbitrators in accordance with the commercial arbitration rules of the American Arbitration Association. Each Party, upon notice to the other Party, shall appoint one arbitrator. The two

arbitrators appointed by the Parties shall appoint a third arbitrator. The arbitrators shall be lawyers who will have substantial patent law or patent litigation experience and substantial commercial law or commercial litigation experience. The arbitrators shall be instructed to follow federal precedents, laws and evidentiary rules that would be applicable to litigation in the Federal Court of the jurisdiction in which the arbitration is held, except for those issues which involve patent issues, in which case the arbitrators shall be instructed to follow federal precedents, laws and evidentiary rules that would be applicable to litigation in the Federal Circuit Court of Appeals.

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(3) The arbitration shall be conducted in English, and all written submissions shall be in English.

(4) The Parties agree that the decision of the arbitrators shall be final and binding on the Parties. The decision of the arbitrators shall be carried out voluntarily and without delay.

(5) The fees and expenses of the arbitrators shall be shared equally by the Parties. Each Party will bear its own costs and expenses, including without limitation, its own legal fees and expert witness fees. Notwithstanding the foregoing, the Parties agree to be bound by and obey any order of the arbitrators relating to one Party being liable for any such costs, including without limitation, the legal fees of the other Party.

11.3.4 EQUITABLE RELIEF. Nothing in this Agreement shall prevent or limit a Party's right to file and prosecute an action to seek injunctive relief to prevent or stay a breach of this Agreement or any action necessary to enforce the award of the arbitrators.

11.4 GOVERNING LAW. Except as specifically otherwise provided herein, this Agreement shall be governed by and construed in accordance with the laws of the State of Delaware.

11.5 FORCE MAJEURE. In the event of the intervention of a force majeure, which term shall include, without limitation, acts of God, strikes, labor disturbances, lockouts, riots, epidemics, quarantines, wars or conditions of war, actions, inactions or regulations of any government, fires, acts of terrorists, insurrections, embargoes or trade restrictions, or any other reasons beyond a Party's reasonable control, the Party affected by the force majeure shall use Commercially Reasonable Efforts to comply with the Agreement. In the case that such Commercially Reasonable Efforts fail or are futile, such Party shall not be responsible for delays or a failure to perform under this Agreement caused by a force majeure. Provided, however, that any payment obligations of a Party shall not be affected or excused by such force majeure. If a Party's delay or failure to perform continues for more than one hundred twenty (120) days, the other Party may terminate this Agreement. In the event that either Party shall incur a delay in delivery or performance for a reason permitted by this Article, that Party shall notify the other Party within five (5) days from the date of the actual occurrence of the cause for such delay

11.6 NOTICES. All notices, requests and other communication hereunder shall be in writing and sent by facsimile with confirmation sent by courier requiring acknowledgment of receipt by the respective Parties as follows:

To MBX: Metabolix Corporation
21 Erie Street
Cambridge, MA 02139-4260
Attn: President and CEO

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With copy to: Mintz Levin Cohn Ferris Glovsky and Popeo PC
One Financial Place
Boston, MA 02111
Attn: Christopher J. Denn, Esq.

To ADM Sub: ADM Polymer Corporation
4666 Faries Parkway

Decatur, IL 62526
Attn: President

With copy to: Asher-Daniels-Midland Company
4666 Faries Parkway
Decatur, IL 62526
Attn: General Counsel

Either Party may change the registered address to which such notice should be sent by giving written notice to the other Party.

11.7 INTEGRATION; ENTIRE AGREEMENT. This Agreement contains the entire agreement of the Parties with regard to the subject matter contained herein and supersedes all prior written and oral agreements, understandings and negotiations, with regard to such subject matter.

11.8 AMENDMENTS. This Agreement, including this provision, may not be amended without a written instrument signed by duly authorized representatives of both Parties.

11.9 SEVERABILITY. In the event that any part of this Agreement is adjudicated to be invalid or unenforceable because it contravenes any applicable law or regulation, the Parties shall perform this Agreement in accordance with their original intentions as set forth herein, corresponding as closely as possible to the invalid or unenforceable part insofar as it is still valid under such law or regulation and reflects the original intention of the Parties. The validity of the remaining permissible portions of this Agreement shall remain unaffected thereby.

11.10 WAIVER/CUMULATIVE RIGHTS. No failure by any Party to insist upon the strict performance of any covenant, duty, agreement or condition of this Agreement or to exercise any right or remedy upon a breach thereof shall constitute a waiver of any such breach or any other covenant, duty, agreement or condition. All rights and remedies which a Party may have hereunder or by operation of law are cumulative, and the pursuit of one right or remedy shall not be deemed an election to waive or renounce any other right or remedy.

11.11 NO JOINT VENTURE OR PARTNERSHIP RELATIONSHIP. Nothing contained in or relating to this Agreement is or shall be deemed to constitute a joint venture, partnership or agency relationship between any of the Parties hereto and no Party shall have any authority to act for or to assume any obligation or responsibility on behalf of the other Party.

11.12 FURTHER ASSURANCES. Each Party shall duly execute and deliver, or cause to be duly executed and delivered, such further instruments and do and cause to be done such further acts and things, including without limitation the filing of such assignments, agreements, documents and instruments, as may be necessary or as the other Party may reasonably request

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in connection with this Agreement or to carry out more effectively the provisions and purposes hereof, or to better assure and confirm unto such other Party its rights and remedies under thus Agreement.

11.13 CONSTRUCTION. Except where the context otherwise requires, wherever used the singular shall include the plural, the plural the singular, the use of any gender shall be applicable to all genders, the word "or" is used in the inclusive sense and the word "any" shall mean any one item, or all items, in a referenced category. The captions of this Agreement are for convenience of reference only and in no way define, describe, extend, or limit the scope or intent of this Agreement or the intent of any provision contained in this Agreement. The language of this Agreement shall be deemed to be the language mutually chosen by the Parties and no rule of strict construction shall be applied against either Party hereto.

11.14 ACKNOWLEDGMENT. The Parties hereby acknowledge that all licenses granted herein are, for the purposes of Section 365(n) of Title 11 of the U.S. Code, licenses of rights to intellectual property as defined in said Title 11.

11.15 COUNTERPARTS. This Agreement may he executed in any number of counterparts, each of which shall be deemed to be an original, and all of which, taken together, shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the day and year above written.

ADM POLYMER CORPORATION

By: /s/ JOHN D. RICE

Name: John D. Rice

Title: President

METABOLIX, INC.

By: /s/ JAMES J. BARBER

Name: James J. Barber

Title: President
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EXHIBIT 10.22

WHENEVER CONFIDENTIAL INFORMATION IS OMITTED HEREIN (SUCH OMISSIONS ARE DENOTED BY AN ASTERISK*), SUCH CONFIDENTIAL INFORMATION HAS BEEN SUBMITTED SEPARATELY TO THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO A REQUEST FOR CONFIDENTIAL TREATMENT.

FIRST AMENDMENT TO TECHNOLOGY ALLIANCE AND OPTION AGREEMENT

This First Amendment to Technology Alliance and Option Agreement (this "Amendment") dated as of September 8, 2005 (the "Effective Date") is by and between ADM Polymer Corporation, a corporation duly incorporated and validly existing under the laws of the State of Delaware, with headquarters located at 4666 Faries Parkway, Decatur, IL 62526 ("ADM Sub"), and Metabolix, Inc., a corporation duly incorporated and validly existing under the laws of the State of Delaware, with headquarters located at 21 Erie Street, Cambridge, MA 02139-4260 ("MBX") (MBX and ADM Sub are collectively the "Parties" and each is a "Party").

RECITALS

WHEREAS, MBX and ADM Sub entered into that certain Technology Alliance and Option Agreement dated as of November 4, 2004 (the "Agreement"); and

WHEREAS, MBX and ADM Sub now desire to modify the terms of the Agreement as set forth herein.

NOW, THEREFORE, in consideration of the recitals and the mutual covenants and promises contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto do hereby agree as follows:

ARTICLE 1
DEFINITIONS

1.1 DEFINITIONS. Capitalized terms used but not defined herein shall have the meaning ascribed to them in the Agreement.

ARTICLE 2
AMENDMENTS AND ADDITIONS TO TERMS

2.1 AMENDMENT TO ARTICLE 1. Article 1 of the Agreement is hereby amended by deleting the existing definition for "Fermentation Performance Parameters" and replacing it with the following text:

> "FERMENTATION PERFORMANCE PARAMETERS" means the various parameters for production of PHA Cell Paste through fermentation at the * scale as set forth on AMENDED EXHIBIT B.

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2.2 AMENDMENT OF SECTION 3.1. The Agreement is hereby amended by deleting the existing Section 3.1 in its entirety and replacing it with the following text:

> "3.1 GOAL OF TECHNOLOGY ALLIANCE PROGRAM. The goal of the Technology Alliance Program is to (i) produce PHA Cell Paste, in a fermenter having a capacity of approximately *, and at ADM Sub's option then in a fermenter having a capacity of approximately *, in all cases, in a manner and with results that meet the applicable Fermentation Performance Parameters; (ii) demonstrate recovery of PHA Material in a manner and with results that meet the Recovery Performance Parameters (the items listed in the foregoing "(i)" and "(ii)" collectively are the "Technical Aspects of the Goal"); and (iii) based upon the results of (i) and (ii) above, have ADM Sub develop and the TAC agree upon a completed master plan for Construction of the ADM Sub Manufacturing Facility, including without limitation, surveys, blueprints, and engineering studies, which master plan shall be organized into a detailed, multiphase process for undertaking and completing

Construction of the ADM Sub Manufacturing Facility and which shall have a project budget with projected detailed expenditures provided for each phase of the Construction process, all of which shall be, in form and substance, suitable for ADM Sub's management and board of directors to make a determination to approve the expenditures for the ADM Sub Manufacturing Facility as and to the extent required by ADM Sub's corporate governance polices and procedures (the "ADM Sub Construction Master Plan and Budget") (collectively the "Goal"). Successful completion of the Goal is intended to confirm the potential economics of producing PHA Material at commercial scale as part of a long-term commercial alliance."

2.3 ADDITION OF SECTION 3.2.4.1. The Agreement is hereby amended by adding the following Section 3.2.4.1:

"3.2.4.1 INITIAL RECOVERY OPERATIONS. The Parties hereby agree that MBX will enter into an agreement to obtain access to toll recovery services, from a Third Party (the "Toll Producer") on substantially the terms set forth in the tolling agreement attached hereto as Schedule A (the "Tolling Agreement"). These recovery services are anticipated to last until approximately March of 2006 and to result in the recovery of up to approximately thirty five (35) metric tons of PHA Material (the "Initial Recovery Services"). Except as specifically set forth herein, the Parties' rights and obligations with respect to the Initial Recovery Services and the PHA Material produced in connection therewith shall be governed by the Agreement as activities conducted under Section 3.2.4. Responsibility for the fees charged by the Toll Producer under the Tolling Agreement for the Initial Recovery Services, related equipment and capital expenses, and the reasonable out-of-pocket expenses of the Parties in performing technical support or auditing of the Initial Recovery Services, including, for example, travel and lodging expenses, but excluding, salary and benefits paid or payable to employees or representatives of the Parties participating in such activities (collectively, "Tolling Expenses") shall be shared equally by the Parties, subject to the limitations set forth herein. The Parties shall, determine reasonable

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methods for promptly accounting for the total Tolling Expenses on a monthly basis and making such payments as are necessary in order to give effect to the equal sharing of the Tolling Expenses. Notwithstanding the foregoing: (i) MBX shall be solely responsible for the operating expenses (including its internal costs and the costs of the Toll Producer but excluding the related equipment and capital expenses) until (y) the earlier of TAC's determination that the recovery of PHA Material during a Recovery Campaign was achieved in a manner and with results that met the Recovery Performance Parameters as defined in Amended Exhibit E on any one of the three specified compositions, or ADM Sub's payment of the milestone payment set forth in Section 5.1 related to the Recovery Performance Parameters, and (z) ADM's receipt of a letter from the U.S. Drug Enforcement Administration advising that polyhydroxyalkanoate containing gamma-hydroybutyric acid as part of the polymer chain will not be regulated as a controlled substance under the Controlled Substances Act and any Drug Enforcement Administration regulations, (ii) ADM shall not be obligated to pay in excess of * of Tolling Expenses hereunder; (iii) ADM shall not be obligated to pay in excess of * of the equipment and capital expenses comprising the Tolling Expenses hereunder; and (iv) ADM shall not be responsible for any Tolling Expenses incurred after the end of the term of this Agreement as set forth in Section 8.1, except as otherwise provided under the Commercial Alliance Agreements, if applicable. In the event ADM terminates this Agreement or decides not to exercise the Option, then MBX shall pay ADM an amount equal to one half of the depreciated book value of any removable assets (i.e., not fixtures) that are listed on the Consignment Agreement or any Addendum to Consignment Agreement (as such agreement and such addendum are referenced in the Tolling Agreement), the purchase price for which was funded equally by the Parties. MBX agrees to provide ADM with equal access to the facility of the Toll Producer as and to the extent such access is made available to MBX and its designees under the Tolling Agreement. The PHA Material produced in connection with the Initial Recovery Services shall be part of the Technology Alliance Output or Marketing Material as determined under Section 3.3, and, in the event it is sold by MBX, all revenues generated by such sales shall be applied against Tolling Expenses before such expenses are allocated for

payment by the Parties. The Parties agree to work together to determine the costs (capital expenditures and operating costs) to use ADM's Vitamin C facility for pilot sourcing of PHA Material in the event ADM exercises the Option; PROVIDED, HOWEVER, nothing herein shall preclude ADM from utilizing all or any portion of the Vitamin C facility for other uses."

2.4 AMENDMENT OF SECTION 3.3. The Agreement is hereby amended by deleting the existing Section 3.3 in its entirety and replacing it with the following text:

"3.3 OUTPUT FROM TECHNOLOGY ALLIANCE PROGRAM. ADM Sub will use Commercially Reasonable Efforts to produce PHA Cell Paste in such amounts as result from the operations set forth in the Technology Alliance Plan until it has satisfied the Fermentation Performance Parameters (the "Technology Alliance Output") and such additional amounts thereafter as the Parties may agree to in

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writing (the "Marketing Material") for use by MBX in developing the market for PHA Material. The Technology Alliance Output and the Marketing Material will be made available by ADM Sub to MBX as set forth in this Section 3.3."

2.5 AMENDMENT OF SECTION 3.3.1. The Agreement is hereby amended by deleting the existing Section 3.3.1 in its entirety and replacing it with the following text:

"3.3.1 ANALYSIS OF TECHNOLOGY ALLIANCE OUTPUT. MBX will use the Technology Alliance Output to demonstrate recovery of PHA Material in accordance with Section 3.2.4 and the Technology Alliance Plan, and ADM shall provide the Technology Alliance Output to MBX as MBX may require to perform such recovery demonstration, including the Initial Recovery Services. Further, the Technology Alliance Output will be used by the Parties to perform such evaluation and analysis as is necessary or useful in determining whether the Parties have achieved the Goal. Without limiting the foregoing statement, the Technology Alliance Output will be evaluated and analyzed by the Parties, in accordance with the procedures and methods set forth in the Technology Alliance Plan, to determine whether the Technology Alliance Output meets the Fermentation Performance Parameters and whether PHA Material recovered from the Technology Alliance Output meets the Recovery Performance Parameters."

2.6 AMENDMENT OF SECTION 3.3.2. The Agreement is hereby amended by deleting the existing Section 3.3.2 in its entirety and replacing it with the following text:

"3.3.2 PURCHASE OF TECHNOLOGY ALLIANCE OUTPUT BY MBX; COST SHARING FOR MARKETING MATERIAL. MBX shall have the right, but not the obligation, to purchase the Technology Alliance Output that is not required to perform the recovery demonstration described in Section 3.3.1 above from ADM Sub at a price of * of PHA Material contained within the PHA Cell Paste, on a one hundred percent (100%) purity basis; provided such price shall be reduced to * at such times as ADM is responsible for equally sharing the Tolling Expenses (including the operating expenses) pursuant to Section 3.2.4.1. MBX shall purchase the Marketing Material, irrespective of whether the Marketing Material meets the applicable specifications or not, at fifty percent (50%) ADM Sub's Manufacturing Cost, F.O.B. Decatur, Illinois. MBX may exercise this purchase option at any time, and from time-to-time, during the Technology Alliance Program and up to thirty (30) days after the expiration or termination of the Technology Alliance Program, by written notice to ADM Sub, stating its desire to purchase, the quantity to be purchased (up to the total amount that is then available) and shipping and delivery instructions. ADM Sub shall invoice MBX for amounts so purchased no sooner than at the time of delivery and the purchase price for amounts ordered and delivered in accordance herewith shall be payable by MBX within thirty (30) days of receipt of an invoice from ADM Sub by wire transfer of immediately available funds to an account in the United States designated by ADM Sub. Technology Alliance Output and Marketing Material purchased hereunder shall be purchased "as is," without warranty of any kind other than that the Technology Alliance Output and Marketing Material shall have

been stored and handled, from the time of production until the delivery to MBX, in accordance with the requirements of the Technology Alliance Plan or as otherwise agreed by the Parties. Technology Alliance Output and Marketing Material purchased by MBX shall be used by MBX for performing its obligations pursuant to this Agreement and for market development activities benefiting the Parties and the potential Commercial Alliance between them. Technology Alliance Output that is not purchased by MBX shall be used by ADM Sub solely for internal research and development purposes, or if not so used, ADM Sub shall either store (for later sale to MBX or the Joint Sales Company or for later use by ADM Sub solely for internal research purposes) or dispose of the unused Technology Alliance Output, at ADM Sub's option."

2.7 AMENDMENT OF SECTION 4.3. The Agreement is hereby amended by deleting the existing Section 4.3 in its entirety and replacing it with the following text:

"4.3 GRANT OF OPTION. MBX hereby grants to ADM Sub the right and option to enter into a commercial alliance for the further research, development, manufacture, use, sale and importation of the PHA Material and PHA Formulations on the terms and conditions set forth in the Commercial Alliance Agreements (the "Option"). The Option shall be exercisable by ADM Sub at any time after Effective Date and until thirty (30) days after the expiration of the term of this Agreement, by written notice to MBX; PROVIDED, HOWEVER, that, in either case, the Option shall not be exercisable if and for so long as ADM Sub is in breach of this Agreement. Following the exercise of the Option, the Parties shall promptly execute and deliver the Commercial Alliance Agreements in accordance with this Agreement."

2.8 AMENDMENT OF SECTION 5.1. The Agreement is hereby amended by deleting the existing Section 5.1 in its entirety and replacing it with the following text:

"5.1 PAYMENTS. Within ten (10) days after the Effective Date, ADM Sub shall pay to MBX the amount of * as a non-refundable, non-creditable upfront payment. Within ten (10) days following the TAC's determination that the production of PHA Cell Paste in a fermenter having a capacity of approximately * was achieved in a manner and with results that met the applicable Fermentation Performance Parameters, ADM Sub shall pay to MBX the amount of * as a non-refundable, non-creditable milestone payment. Within ten (10) days following the TAC's determination that the recovery of PHA Material was achieved in a manner and with results that met the Recovery Performance Parameters, ADM Sub shall pay to MBX the amount of * as a non-refundable, non-creditable milestone payment. Within ten (10) days following the first to occur of: (i) the achievement of the Goal and (ii) the exercise of the Option by ADM Sub, ADM Sub shall pay to MBX the amount of * as a non-refundable, non-creditable milestone payment. Anything herein to the contrary notwithstanding, in the event that ADM Sub desires to exercise the Option in accordance with Section 4.3, the above-described upfront payment and the three (3) milestone payments, to the extent not already paid, shall be due and

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payable in full as a pre-condition to the exercise of the Option. Amounts due under this Section 5.1 shall be payable by wire transfer of immediately available funds to an MBX bank account in accordance with instructions to be provided to ADM Sub by MBX."

2.9 AMENDMENT OF SECTION 5.2. The Agreement is hereby amended by deleting the existing Section 5.2 in its entirety and replacing it with the following text:

"5.2 OTHER EXPENSES. Except as provided in Section 5.1, Section 3.2.4.1 and Section 3.3.2, each Party shall bear its own costs and expenses incurred in performing under this Agreement."

2.10 AMENDMENT OF EXHIBITS. The Agreement is hereby amended by deleting the existing Exhibit B and replacing it with the text set forth in Amended Exhibit B attached hereto, by deleting existing Exhibit D and replacing it with the text set forth in Amended Exhibit D attached hereto, and by deleting the existing Exhibit E and replacing it with the text set forth in Amended Exhibit E attached hereto.

ARTICLE 3
CONFIRMATION OF TERMS

3.1 CONFIRMATION OF TERMS. This Amendment shall be a part of the Agreement and shall be governed in accordance with the terms and conditions set forth therein, as the same are amended hereby, including without limitation, the terms and conditions set forth in Article XI of the Agreement, entitled "Miscellaneous." The Parties hereby agree and acknowledge that, except as expressly set forth herein, the Agreement shall remain in full force and effect in accordance with its terms.

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IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be executed by their duly authorized representatives as of the day and year above written.

ADM POLYMER CORPORATION

By: /s/ JOHN D. RICE

Name: John D. Rice
Title: President

METABOLIX, INC.

By: /s/ JAMES J. BARBER

Name: James J. Barber
Title: President

* CONFIDENTIAL TREATMENT REQUESTED

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use in this Amendment No. 1 to the Registration Statement on Form S-1 of our report dated June 26, 2006, except for the information presented in footnote 14 for which the date is July 25, 2006, relating to the financial statements of Metabolix, Inc., which appears in such Amendment No. 1 to the Registration Statement. We also consent to the references to us under the headings "Experts" and "Selected Financial Data" in such Amendment No. 1 to the Registration Statement.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
August 30, 2006

QuickLinks

[GOODWIN/PROCTER LETTERHEAD]

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August 31, 2006

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549-7010

Attention: Pamela A. Long

RE: METABOLIX, INC.
REGISTRATION STATEMENT ON FORM S-1 FILED JULY 14, 2006
FILE NO. 333-135760

Dear Ladies and Gentlemen:

This letter is being furnished on behalf of Metabolix, Inc. (the "COMPANY") in response to comments in the letter dated August 10, 2006 (the "LETTER") from Pamela A. Long of the Staff (the "STAFF") of the Securities and Exchange Commission (the "COMMISSION") to James J. Barber, Chief Executive Officer of the Company, with respect to the Company's Registration Statement on Form S-1 (the "REGISTRATION STATEMENT") that was filed with the Commission on July 14, 2006. Amendment No. 1 to the Registration Statement ("AMENDMENT NO. 1"), including the prospectus contained herein, is being filed on behalf of the Company with the Commission on August 31, 2006.

The responses and supplementary information set forth below have been organized in the same manner in which the Commission's comments were organized and all page references in the Company's response are to Amendment No. 1 as marked. Copies of this letter and its attachments are being sent under separate cover to Brigitte Lippmann of the Commission. The Company respectfully requests that the Staff return to us all material supplementally provided by the Company once the Staff has completed its review.

GENERAL

1. PLEASE INCLUDE ALL INFORMATION THAT IS NOT SUBJECT TO RULE 430A IN THE NEXT AMENDMENT, INCLUDING A BONA FIDE ESTIMATE OF THE RANGE OF THE MAXIMUM OFFERING PRICE FOR THE SHARES

AND THE MAXIMUM NUMBER OF SHARES OFFERED. THIS INFORMATION MUST BE INCLUDED ON THE PROSPECTUS COVER PAGE, AS WELL AS IN THE BODY OF THE PROSPECTUS. SEE INSTRUCTION 1(A) TO ITEM 501(B)(3) OF REGULATION S-K. WE WILL NEED ADEQUATE TIME TO REVIEW THIS INFORMATION ONCE IT IS PROVIDED. YOU MUST FILE THIS AMENDMENT PRIOR TO CIRCULATING THE PROSPECTUS.

RESPONSE: The Company advises the Staff that a BONA FIDE estimate of the range of the offering price for the shares will be $9.80 to $11.44, and a BONA FIDE estimate of the range of shares offered, assuming no exercise of the underwriters' over-allotment option, is from 7,653,061 to 6,555,944 shares. Assuming the exercise of the underwriters' over-allotment option, a BONA FIDE estimate of the range of shares offered is 8,801,020 to 7,539,335. In addition, ADM has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the price to the public in this offering. The Company confirms that any preliminary prospectus it circulates to prospective investors will include all non-Rule 430A information, including a BONA FIDE estimate of the public offering within that range.

2. ALL EXHIBITS ARE SUBJECT TO OUR REVIEW. ACCORDINGLY, PLEASE FILE OR SUBMIT ALL OF YOUR EXHIBITS WITH YOUR NEXT AMENDMENT, OR AS SOON AS POSSIBLE. PLEASE NOTE THAT WE MAY HAVE COMMENTS ON THE LEGAL OPINION AND OTHER EXHIBITS ONCE THEY ARE FILED. UNDERSTAND THAT WE WILL NEED ADEQUATE TIME TO REVIEW THESE MATERIALS BEFORE ACCELERATING EFFECTIVENESS.

RESPONSE: The Company advises the Staff that additional exhibits have been filed with Amendment No. 1 and the remainder of the exhibits will be filed

as soon as possible. The Company understands that the Staff will need adequate time to review these materials before accelerating effectiveness.

3. PRIOR TO THE EFFECTIVENESS OF THE REGISTRATION STATEMENT, PLEASE ARRANGE TO HAVE THE NASD CALL US OR PROVIDE US WITH A LETTER INDICATING THAT THE NASD HAS CLEARED THE FILING.

RESPONSE: The Company advises the Staff that the Company will arrange for the NASD to contact the Staff prior to effectiveness of the Registration Statement to indicate that the NASD has cleared the filing.

4. COMMENTS REGARDING YOUR CONFIDENTIAL TREATMENT REQUEST WILL BE SENT UNDER SEPARATE COVER. PLEASE NOTE THAT WE WILL NOT BE IN A POSITION TO CONSIDER A REQUEST FOR ACCELERATION OF EFFECTIVENESS OF THE REGISTRATION STATEMENT UNTIL WE RESOLVE ALL ISSUES CONCERNING THE CONFIDENTIAL TREATMENT REQUEST.

RESPONSE: The Company confirms that it will not request acceleration of the effectiveness of the Registration Statement until all issues are resolved concerning the confidential treatment request.

PROSPECTUS COVER PAGE

5. PLEASE DELETE THE REFERENCE TO "SOLE BOOK-RUNNING MANAGER."

RESPONSE: The Company advises the Staff that the cover page of the prospectus has been revised in response to the Staff's comment.

6. WE NOTE THAT YOUR COVER PAGE CONTAINS INFORMATION THAT IS NOT REQUIRED BY ITEM 501 OF REGULATION S-K AND IS NOT KEY TO AN INVESTMENT DECISION. IN THIS REGARD, WE NOTE THE STATEMENT "WHERE NATURE PERFORMS" UNDERNEATH YOUR COMPANY'S NAME AT THE TOP OF THE PAGE. PLEASE REMOVE THIS STATEMENT FROM YOUR COVER PAGE. PLEASE ALSO COMPLY WITH THIS COMMENT ON THE OUTSIDE BACK COVER PAGE OF YOUR PROSPECTUS.

RESPONSE: The Company advises the Staff that the cover page and outside back cover page of the prospectus have been revised in response to the Staff's comment.

TABLE OF CONTENTS, PAGE I

7. WE NOTE YOUR DISCLOSURE THAT INVESTORS SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN THIS PROSPECTUS. IF YOU INTEND TO USE ANY FREE WRITING PROSPECTUSES, YOU SHOULD CONSIDER REMOVING THIS LANGUAGE WHEN YOU HAVE A SECTION 10 PROSPECTUS AVAILABLE, AS YOU WILL BE LIABLE FOR, AND INVESTORS WOULD BE ENTITLED TO RELY UPON, THAT INFORMATION.

RESPONSE: The Company advises the Staff that page i of the prospectus has been revised in response to the Staff's comment.

PROSPECTUS SUMMARY, PAGE L

8. THE FOREPART OF YOUR PROSPECTUS CONTAINS UNNECESSARY JARGON AND TECHNICAL TERMS. FOR EXAMPLE, THESE WORDS AND PHRASES APPEAR IN THE PROSPECTUS SUMMARY AND THE RISK FACTORS:

- MICROBIAL
- BIOMASS BIOREFINERY SYSTEM
- THERMOFORMING
- C3 AND C4 CHEMICALS

ELIMINATE THE INDUSTRY JARGON FROM THE FOREPART OF YOUR PROSPECTUS. INSTEAD, EXPLAIN THESE CONCEPTS IN SIMPLE, CONCRETE, EVERYDAY LANGUAGE. IN THE REMAINDER OF THE PROSPECTUS, PLACE ANY INDUSTRY TERMS YOU USE IN CONTEXT SO THOSE POTENTIAL INVESTORS WHO DO NOT WORK IN YOUR INDUSTRY CAN EASILY UNDERSTAND THE DISCLOSURE. THE MEANING OF THE TERM SHOULD BE MADE CLEAR AT THE FIRST PLACE THE TERM APPEARS. SEE RULE 421(D)(2)(II) OF REGULATION C.

RESPONSE: The Company advises the Staff that the prospectus has been revised in response to the Staff's comment.

9. PLEASE REVISE TO BRIEFLY EXPLAIN, WITH MORE DETAIL IN AN APPROPRIATELY CAPTIONED SECTION OF YOUR BUSINESS SECTION, THE GENETIC ENGINEERING YOU ENGAGE IN AND HOW IT RELATES TO YOUR BUSINESS PLATFORMS.

RESPONSE: The Company advises the Staff that page 2 of the prospectus has been revised in response to the Staff's comment.

10. PLEASE ALSO REVISE TO BRIEFLY PROVIDE MORE DETAIL ABOUT SWITCHGRASS. FOR EXAMPLE, WITHOUT LIMITATION, BRIEFLY DESCRIBE WHAT SWITCHGRASS IS, WHERE IT GROWS, AND HOW YOU PLAN TO PROCURE IT IN AMOUNTS SUFFICIENT TO CARRY OUT THIS PART OF YOUR BUSINESS PLAN.

RESPONSE: The Company advises the Staff that page 65 of the prospectus has been revised in response to the Staff's comment. Since the Company's switchgrass program is still in the research and development stage, the Company has not yet determined a commercialization strategy for this program, which would include the business plan for procuring commercial quantities of switchgrass.

11. IN THE FIRST BULLET POINT ON PAGE 3, PLEASE REVISE TO EXPLAIN WHAT YOU MEAN BY "PATENT ESTATE."

RESPONSE: The Company advises the Staff that page 3 of the prospectus has been revised in response to the Staff's comment.

METABOLIX, INC., PAGE 1

12. PLEASE DISCLOSE IN THE FOREPART OF THIS SECTION THAT SINCE 1992 YOU HAVE BEEN ENGAGED SOLELY IN RESEARCH AND DEVELOPMENTAL ACTIVITIES AND, AS YOU DISCLOSE UNDER RISK FACTORS, YOU CURRENTLY DO NOT PRODUCE COMMERCIAL PRODUCTS AND MAY NOT BE ABLE TO SUCCESSFULLY MANUFACTURE PHA NATURAL PLASTICS AT A COMMERCIAL SCALE IN A TIMELY OR ECONOMICAL MANNER.

RESPONSE: The Company advises the Staff that page 3 of the prospectus has been revised in response to the Staff's comment.

13. PLEASE ALSO CONSIDER REVISING YOUR GRAPHICS THAT FOLLOW YOUR COVER PAGE IN ORDER TO REMOVE ANY IMPLICATION THAT YOU CURRENTLY PRODUCE NATURAL PLASTICS.

RESPONSE: The Company advises the Staff that the graphics will be revised in an amendment to the Registration Statement following Amendment No. 1 as the Company's graphic artist needs sufficient time to produce new graphics. The Company currently produces PHA NATURAL PLASTICS for use by customers in commercial products and by potential customers in testing in advance of commercial products by such potential customers. The Company currently produces PHA NATURAL PLASTICS in quantities which it considers to be pilot quantities. The Company's pilot facility has a current capacity of approximately 10 tons per month. The commercial manufacturing facility which is being developed primarily by ADM as part of the Company's strategic alliance is expected to have a capacity of 50,000 tons per year.

14. DISCLOSE THE BASIS FOR YOUR ASSERTION THAT YOU ARE A LEADING BIOTECHNOLOGY COMPANY THAT DEVELOPS AND PLANS TO COMMERCIALIZE ALTERNATIVES TO PETROCHEMICAL BASED PLASTICS. IF YOU FUNDED OR WERE OTHERWISE AFFILIATED WITH ANY OF THE STUDIES OR REPORTS YOU CITE, PLEASE DISCLOSE THIS. OTHERWISE, PLEASE CONFIRM THAT THESE SOURCES ARE WIDELY AVAILABLE TO THE PUBLIC. IF YOU DO NOT HAVE APPROPRIATE INDEPENDENT SUPPORT FOR A STATEMENT, PLEASE REVISE THE LANGUAGE TO MAKE CLEAR THAT THIS IS YOUR BELIEF BASED ON YOUR EXPERIENCE IN THE INDUSTRY, IF TRUE.

RESPONSE: The Company has been recognized by third parties for its leadership in metabolic pathway engineering. The Company will supplementally provide the Staff via overnight courier a copy of its supporting materials, including (i) a summary of the 2005 winners of the United States Environmental Protection Agency Presidential Green Chemistry

Challenge and (ii) a Frost and Sullivan report on bioplastics, for the assertion that the Company is a leading biotechnology company that develops and plans to commercialize alternatives to petrochemical based plastics. These sources are publicly available. The Company is a pioneer in the development and commercialization of alternatives to petrochemical-based plastics. As the Company states on page 61 of the Registration Statement, while most biotechnology products today involve identifying a single gene to produce one protein, the Company has identified and chromosomally inserted a series of genes to produce several proteins and have done so in such a way that they are expressed in a concerted and harmonious fashion to execute the right reactions at the right times in a reliable way. The Company is not aware of other efforts in this field that have executed metabolic pathway engineering to this level of sophistication and with the level of success that the Company has experienced.

15. CURRENTLY YOU HIGHLIGHT ONLY POSITIVE INFORMATION IN THE SUMMARY. FOR EXAMPLE, YOU DISCUSS PHA NATURAL PLASTICS AND STRATEGIES WITHOUT EXPLAINING ANY DISADVANTAGES OR YOUR HISTORY OF LOSSES. REVISE YOUR SUMMARY TO PRESENT A BALANCED VIEW OF YOUR COMPANY.

RESPONSE: The Company advises the Staff that page 3 of the prospectus has been revised in response to the Staff's comment.

RISK FACTORS, PAGE 7

16. DELETE THE THIRD SECOND SENTENCE OF THE FIRST PARAGRAPH. ALL MATERIAL RISKS SHOULD BE DESCRIBED IN THE RISK FACTORS SECTION. IF RISKS ARE NOT DEEMED MATERIAL, YOU SHOULD NOT REFERENCE THEM.

RESPONSE: The Company advises the Staff that page 8 of the prospectus has been revised in response to the Staff's comment.

17. ITEM 503(C) OF REGULATION S-K STATES THAT ISSUERS SHOULD NOT "PRESENT RISK FACTORS THAT COULD APPLY TO ANY ISSUER OR TO ANY OFFERING." THE RISKS YOU DISCLOSE RELATING TO BEING A PUBLIC COMPANY AND DEVELOPING INTERNAL CONTROLS COULD APPLY TO NEARLY ANY ISSUER IN YOUR INDUSTRY AND EVEN IN OTHER INDUSTRIES. IF YOU ELECT TO RETAIN THESE GENERAL RISK FACTORS IN YOUR PROSPECTUS, YOU MUST CLEARLY EXPLAIN HOW THEY APPLY TO YOUR COMPANY OR OFFERING. FOR EXAMPLE, DISCLOSE WHETHER YOU OR YOUR AUDITORS HAVE IDENTIFIED ANY MATERIAL DEFICIENCIES RELATED TO YOUR DISCLOSURE CONTROLS OR INTERNAL CONTROLS.

RESPONSE: The Company advises the Staff that page 20 of the prospectus has been revised in response to the Staff's comment.

18. PLEASE PROVIDE THE INFORMATION INVESTORS NEED TO ASSESS THE MAGNITUDE OF THE RISKS. FOR EXAMPLE:

- QUANTIFY THE COST OF CONSTRUCTING THE COMMERCIAL MANUFACTURING FACILITY AND ANCILLARY FACILITIES UNDER "WE MAY NOT BE ABLE TO DEVELOP MANUFACTURING CAPACITY...." ON PAGE 8;

- QUANTIFY YOUR EXISTING CASH RESOURCES AND ANTICIPATED PAYMENTS FROM YOUR STRATEGIC ALLIANCE WITH ADM UNDER "WE MAY NEED TO SECURE ADDITIONAL FUNDING...." ON PAGE 12;

- DISCLOSE WHETHER ANY MATERIAL PATENT LICENSES ARE DUE TO EXPIRE IN THE NEAR FUTURE UNDER "A SUBSTANTIAL PORTION OF THE TECHNOLOGY USED IN OUR BUSINESS ...." ON PAGE 15 AND TELL INVESTORS WHAT YOU MEAN BY "A SUBSTANTIAL PORTION;" AND

- QUANTIFY THE EFFECT THAT THE ADOPTION OF SFAS NO. 123R'S FAIR VALUE METHOD WILL HAVE ON YOUR RESULTS OF OPERATIONS.

RESPONSE: The Company advises the Staff that the prospectus has been revised in response to the Staff's comment.

19. PLEASE REVISE THROUGHOUT YOUR RISK FACTORS TO REMOVE THE IMPLICATION THAT YOU CURRENTLY HAVE PRODUCTS OR ADVISE US OTHERWISE. FOR EXAMPLE, WITHOUT LIMITATION, REFER TO THE FOLLOWING RISK FACTORS:

- PATENT PROTECTION FOR OUR PRODUCTS IS IMPORTANT AND UNCERTAIN, PAGE 9.

- OUR PRODUCTS ARE MADE USING GENETICALLY MODIFIED PRODUCTS, PAGE 16.

- WE FACE RISKS ASSOCIATED WITH OUR INTERNATIONAL BUSINESS, PAGE 18.

RESPONSE: The Company advises the Staff that the Company currently has products. With respect to the Company's current products, please see our response to comment number 13.

WE MAY NOT BE ABLE TO DEVELOP MANUFACTURING CAPACITY SUFFICIENT TO MEET DEMAND ... , PAGE 8

20. IT APPEARS THAT YOU ARE INCLUDING MULTIPLE RISKS UNDER THIS SUBHEADING. IN THIS REGARD, WE NOTE THAT THE RISK DESCRIBED IN THE FIRST PARAGRAPH OF THIS RISK FACTOR APPEAR TO BE A SIGNIFICANT RISK THAT SHOULD STAND ALONE UNDER ITS OWN EXPLANATORY SUBHEADING. PLEASE REVISE ACCORDINGLY.

RESPONSE: The Company advises the Staff that page 9 of the prospectus has been revised in response to the Staff's comment.

WE RELY HEAVILY ON ADM ... , PAGE 10

21. PLEASE BREAK OUT THE FIRST SENTENCE INTO BULLET POINTS. PLEASE ALSO APPLY THIS COMMENT TO THE THIRD SENTENCE IN YOUR FIRST RISK FACTOR ON PAGE 23, "OUR MANAGEMENT WILL HAVE BROAD DISCRETION ...."

RESPONSE: The Company advises the Staff that pages 11 and 24 of the prospectus have been revised in response to the Staff's comment.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS, PAGE 26

22. PLEASE DELETE THE LANGUAGE IN THE LAST PARAGRAPH OF THIS SECTION TO ELIMINATE THE IMPLICATION THAT YOU ARE NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION YOU ELECT TO INCLUDE IN YOUR PROSPECTUS. MAKE SIMILAR CHANGES UNDER MARKET AND INDUSTRY DATA ON PAGE 100.

RESPONSE: The Company advises the Staff that pages 26 and 101 of the prospectus have been revised in response to the Staff's comment.

USE OF PROCEEDS, PAGE 28

23. PLEASE QUANTIFY AND STATE THE AMOUNT OF NET PROCEEDS YOU ANTICIPATE USING FOR EACH OF THE PURPOSES LISTED.

RESPONSE: The Company advises the Staff that page 27 of the prospectus has been revised in response to the Staff's comment.

DILUTION, PAGE 30

24. REVISE THE DILUTION TABLE TO INCLUDE THE SHARES UNDERLYING OPTIONS THAT OFFICERS, DIRECTORS AND AFFILIATES HAVE THE RIGHT TO ACQUIRE.

RESPONSE: The Company advises the Staff that page 29 of the prospectus has been revised in response to the Staff's comment.

25. PLEASE ALSO PROVIDE DILUTION INFORMATION ASSUMING THE UNDERWRITERS EXERCISE THE OVER ALLOTMENT OPTION.

RESPONSE: The Company advises the Staff that page 29 of the prospectus has been revised in response to the Staff's comment.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION, PAGE 34

26. PLEASE DESCRIBE THE GRANTS THAT THE U.S. DEPARTMENT OF ENERGY AND THE U.S. DEPARTMENT OF AGRICULTURE HAVE PROVIDED YOU.

RESPONSE: The Company advises the Staff that page 35 of the prospectus has been revised in response to the Staff's comment.

RESEARCH AND DEVELOPMENT EXPENSES, PAGE 36

27. PLEASE DISCLOSE THE FOLLOWING INFORMATION FOR EACH OF YOUR MAJOR RESEARCH AND DEVELOPMENT PROJECTS:

- THE COSTS INCURRED DURING TO DATE FOR THE PROJECT;

- THE ANTICIPATED COMPLETION DATES;

- THE RISKS AND UNCERTAINTIES ASSOCIATED WITH COMPLETING DEVELOPMENT ON SCHEDULE, AND THE CONSEQUENCES TO OPERATIONS, FINANCIAL POSITION AND LIQUIDITY IF THE PROJECT IS NOT COMPLETED TIMELY; AND FINALLY

- THE PERIOD IN WHICH MATERIAL NET CASH INFLOWS FROM SIGNIFICANT PROJECTS ARE EXPECTED TO COMMENCE.

TO THE EXTENT THAT INFORMATION REQUESTED ABOVE IS NOT KNOWN OR ESTIMABLE, DISCLOSE THAT FACT AND THE REASON WHY IT IS NOT KNOWN. PLEASE REFER TO THE CURRENT ISSUES AND RULEMAKING PROJECTS QUARTERLY UPDATE; DIVISION OF CORPORATION FINANCE, MARCH 31, 2001, UNDER SECTION VIII: INDUSTRY SPECIFIC ISSUES ACCOUNTING AND DISCLOSURE BY COMPANIES ENGAGED IN RESEARCH AND DEVELOPMENT ACTIVITIES.

RESPONSE: The Company advises the Staff that page 36 of the prospectus has been revised in response to the Staff's comment. The Company has not historically tracked its internal historical research and development costs or its personnel and personnel-related costs on a project-by-project basis. The Company does not have many projects, and its programs share a substantial amount of common fixed costs such as facilities, depreciation, utilities and maintenance, which are difficult to allocate.

The Company cannot predict what it will cost to complete the Company's research and development projects or when they will be completed and commercialized. The timing and cost of any project is dependent upon achieving technical objectives, which are inherently uncertain. In addition, the Company's business strategy contemplates it entering into collaborative arrangements with third parties for one or more of the Company's programs. In the event that third parties assume responsibility for certain research or development activities, the estimated completion dates of those activities will be under the control of the third party rather than with the Company. The Company cannot forecast with any certainty which programs, if any, will be subject to future collaborative arrangements, in whole or in part, and how such arrangements would affect the Company's research and development plans or capital requirements.

As a result of the uncertainties discussed above, the Company is unable to determine the duration and completion costs of its research and development projects or when and to what extent the Company will receive cash inflows from the commercialization and sale of products. The Company's inability to complete its research and development projects in a timely manner or its failure to enter into collaborative agreements, when appropriate, could significantly increase the Company's capital requirements and could adversely impact its liquidity. These uncertainties could force the Company to seek additional, external sources of financing from time to time in order to continue with its strategy. The Company's inability to raise additional capital, or to do so on terms reasonably acceptable to the Company, would jeopardize the future success of its business.

CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS, PAGE 37

REVENUE RECOGNITION, PAGE 38

28. YOU DEFERRED $2,000,000 IN CASH RECEIVED IN 2005 UNDER A JOINT DEVELOPMENT ARRANGEMENT WITH BP SINCE THESE AMOUNTS WERE APPLICABLE FOR DETERMINING BP'S EQUITY PARTICIPATION IN A POTENTIAL FUTURE JOINT VENTURE. PLEASE EXPLAIN TO US IN FURTHER DETAIL THE NATURE OF THIS TRANSACTION AND CITE FOR US AUTHORITATIVE ACCOUNTING LITERATURE THAT SUPPORTS YOUR ACCOUNTING TREATMENT.

RESPONSE: The Company advises the Staff that it entered into a joint development agreement with BP in February, 2005 whereby the parties agreed to collaborate with the purpose of conducting a research and development

program intended to lead to the development and commercialization of technology for the production of commercially viable quantities of PHA polymers from genetically modified plants and to the extent successful, to provide the parties a basis for future collaboration towards the commercialization of related products. The agreement required BP to fund research conducted by the Company at a rate of $500,000 per quarter for up to 2 years. The purpose of the research was to allow the parties to gather more information in anticipation of negotiating a 50/50 joint venture ("JV") to commercialize PHA products.

The agreement indicates that these development funds from BP would ultimately be credited to BP as an equity interest in the equally-owned JV in the future. The agreement also contains a provision that states the Company would grant to BP a warrant to purchase shares of its common stock for an amount equal to the amount of money which BP paid to the Company up to a maximum of $2,000,000 if, 30 months following the effective date of the agreement, the Company was not in good faith negotiations to enter into a JV, or if those good faith negotiations did not result in the formation of a JV, BP had not exercised its right to terminate the agreement for no cause, and if the Company had not terminated the agreement due to a breach by BP.

The agreement also provided specifications to guide the parties in establishing the future terms of the JV including how the equity interests of the parties would be determined and the future profit split of the results of the JV. The financial contributions by BP in the form of development payments would impact the determination of these elements of the future JV. More specifically, the development payments made by BP would be considered a capital contribution to the JV and therefore creditable towards determining their 50% ownership interest in the JV. To the extent the parties contributions to the JV, in the form of cash and "in-kind" contributions, (and therefore their ownership interests) were not equal, then the future profit split of the JV to the parties would be impacted.

In the Company's evaluation of the accounting for this agreement, the Company recognized the rather unique and complex nature of this agreement and primarily looked to the guidance provided and concepts embedded in SAB104 and EITF 00-21 with respect to the need to fair value all of the elements of the transaction. Ultimately the

cash received from BP for the development services is in substance to cover both the development services and the potential issuance of equity in the JV in the future. It was not possible to determine during 2005 what portion of these payments can be ascribed to the revenue-generating activity of providing joint development services and therefore separable from the establishment of ownership interests in the future JV. Furthermore, although not explicitly stated in the agreement, one could infer that it is reasonably possible, given the contemplated effect on the profit split of the JV if the capital contributions of the parties were not equal and the typical method of distributions being based, in part, on capital account balances, that this cash received could be returned to BP at some point in the future.

In accordance with SAB104 and EITF 00-21, the Company believes revenue recognition was not appropriate at December 31, 2005.

To a lesser extent, the Company considered the guidance provided in FAS 68. The future JV would be dependent on the success of the joint development efforts of the parties and if these efforts were not successful, then BP would receive value in the form of a warrant for the purchase of the Company's common stock and essentially recover some or all of the economic value they provided to the Company in the form of these development payments. We believed this also supported our conclusion that the amounts should not be recognized as revenue in 2005.

In summary, the Company concluded it was appropriate to defer the recognition of these payments at December 31, 2005.

LIQUIDITY AND CAPITAL RESOURCES, PAGE 42

29. YOU DISCLOSED THAT YOU EXPECT TO CONTINUE TO MAKE SIGNIFICANT INVESTMENTS IN THE PURCHASE OF PROPERTY AND EQUIPMENT TO SUPPORT YOUR PILOT MANUFACTURING AND OTHER EFFORTS. YOU ALSO DISCLOSED THAT YOU ARE UNABLE TO ESTIMATE THE EXACT AMOUNT OF CAPITAL OUTLAYS. HOWEVER, GIVEN THE

MATERIALITY OF THESE CAPITAL EXPENDITURES YOU SHOULD ESTIMATE A RANGE OF ANTICIPATED CAPITAL EXPENDITURES IF PRACTICABLE. PLEASE REFER TO ITEM 303(A)(1)-(2) OF REGULATION S-K.

RESPONSE: The Company advises the Staff that page 44 of the prospectus has been revised in response to the Staff's comment.

BUSINESS, PAGE 47

30. PLEASE DISCLOSE THE SIGNIFICANT TERMS AND CHARACTERISTICS OF THE ADM AGREEMENTS AND THE MIT LICENSE AGREEMENT, INCLUDING THE VARIOUS ELEMENTS OF PRODUCTS AND SERVICES TO BE DELIVERED BY EACH PARTY, THE CONTRACT PERIOD, PAYMENT TERMS AND AMOUNTS, OBLIGATIONS OF THE PARTIES, EVENTS AND CIRCUMSTANCES THAT TRIGGER MILESTONE PAYMENTS, AND TERMINATION PROVISIONS.

RESPONSE: The Company advises the Staff that page 48 of the prospectus has been revised in response to the Staff's comment. A complete description of the ADM agreements is on page 56 and a complete description of the MIT license agreement is on page 57.

31. PLEASE TELL US MORE ABOUT THE BP AMERICA PRODUCTION COMPANY AGREEMENT, SUCH AS WHY THE AGREEMENT WAS TERMINATED. PLEASE PROVIDE US A COPY OF THE JOINT DEVELOPMENT AGREEMENT WITH BP AMERICA. WE MAY HAVE FURTHER COMMENT BASED ON YOUR RESPONSE.

RESPONSE: The Company advises the Staff that at the time the agreement with BP America Production Company was entered into, BP was one of the largest producers of petrochemicals and plastics in the world. The strategic impetus for the arrangement was driven by their polymers business unit and their interest in developing growth opportunities around innovative technologies. Supporting this interest in the Company was the potential for switchgrass-based PHA technology to be used for energy. After the start of the collaboration, BP underwent a restructuring to spin off its plastics businesses into a new public company that was to be named Innovene. While BP retained the contractual obligations associated with the agreement, it was planned that Innovene would be a significant driver behind an effort to establish a joint venture with the Company. Key supporters of the alliance within BP's organization were transferred to Innovene. Prior to the completion of Innovene's initial public offering, BP elected to sell Innovene to the European polymer producer, Ineos. Ineos' business strategy was very different than BP/Innovene's. As a leveraged acquirer of operating assets, Ineos planned to maximize Innovene's operating cash flow, and investing in research and development activities was inconsistent with that strategy. Ineos informed BP that they did not have an interest in pursuing a joint venture with the Company. Without having a polymer business to partner with the Company, BP's strategic interest in the collaboration declined significantly, and they determined that it was in their best interest to discontinue their financial support for the project and, as a result, BP terminated the agreement with the Company in 2006. We are supplementally providing the Staff with a copy of the BP agreement under separate cover.

INTELLECTUAL PROPERTY, PAGE 67

32. PLEASE CLARIFY HOW MANY OF THE ISSUED PATENTS AND PATENT APPLICATIONS ARE OWNED BY THIRD PARTIES AND LICENSED TO YOU.

RESPONSE: The Company advises the Staff that page 68 of the prospectus has been revised in response to the Staff's comment.

33. PLEASE CLARIFY HOW MANY PATENTS, APPLICATIONS, AND LICENSES RELATE TO THE TECHNOLOGY IN YOUR CURRENT BUSINESS PLAN.

RESPONSE: The Company advises the Staff that page 68 of the prospectus has been revised in response to the Staff's comment.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS, PAGE 83

34. PLEASE FILE THE AGREEMENT WITH TEPHA AS AN EXHIBIT.

RESPONSE: The Company advises the Staff that the agreements with Tepha have been filed as exhibits with Amendment No. 1 along with a separate request for confidential treatment thereof.

DESCRIPTION OF CAPITAL STOCK, PAGE 89

35. PLEASE REMOVE THE STATEMENT IN THE SECOND SENTENCE OF THE FIRST PARAGRAPH THAT THE DESCRIPTION IS QUALIFIED BY REFERENCE TO YOUR SECOND AMENDED AND RESTATED CERTIFICATE OF INCORPORATION, AS IT IS INCONSISTENT WITH RULE 411 OF REGULATION C.

RESPONSE: The Company advises the Staff that page 90 of the prospectus has been revised in response to the Staff's comment.

WHERE YOU CAN FIND MORE INFORMATION, PAGE 100

36. PLEASE REVISE THE LAST SENTENCE OF THE FIRST PARAGRAPH THAT INDICATES THAT YOU CURRENTLY FILE EXCHANGE ACT REPORTS WITH THE SEC.

RESPONSE: The Company advises the Staff that page 101 of the prospectus has been revised in response to the Staff's comment.

FINANCIAL STATEMENTS

CONSOLIDATED STATEMENTS OF OPERATIONS, PAGE F-4

37. GIVEN THAT RELATED PARTY REVENUES REPRESENT ALMOST 9% OF REVENUES IN 2005 AND 2004, PLEASE DISCLOSE RELATED PARTY REVENUES ON THE FACE OF YOUR STATEMENTS OF OPERATIONS. PLEASE REFER TO RULE 4-08(K) OF REGULATIONS S-X.

RESPONSE: The Company advises the Staff that the prospectus has been revised in response to the Staff's comment and the financial statements at page F-4 now include a disclosure of related party revenues on the face of the statement of operations.

38. PLEASE DISCLOSE RESEARCH AND DEVELOPMENT COST OF REVENUE AND GRANT COST OF REVENUES SEPARATELY. PLEASE REFER TO RULE 5.03(B)(2) OF REGULATION S-X.

RESPONSE: The Company advises the Staff that it does not separately track research and development costs that are specifically attributable to revenue received under research and development contracts with third parties. The Company has ongoing research and development programs which may be partially funded by third parties via joint research and development agreements. The R&D costs specifically associated with these revenues are not separately tracked, rather, combined in the overall development program with other research and development costs which are internally funded.

All of the Company's government grants are associated with the conduct of certain research and development activities. The Company is reimbursed and records revenues based on its direct costs incurred, and for certain of its programs, for a portion of indirect or overhead related costs. Many of the Company's grants include a reimbursement factor of 50% of certain costs the Company incurs. Due to the contractual terms and protocols surrounding the reimbursement of costs, the Company tracks its direct costs and certain indirect costs associated with the Company's grant programs. The Company does not track costs as a profitability measure, rather, only to support the partial or full reimbursement of certain costs as determined by the provisions of the government grant. The costs the Company tracks are not fully burdened and do not represent the totality of costs associated with the related grant revenues. In addition, there are virtually no costs associated with the Company's license and royalty revenues.

As such, due to the limitations in the Company's tracking of costs, and because the grant programs are for the Company to recover a portion of its related research and development costs and not to earn a profit or margin on its development services, the Company does not believe it is appropriate to present these costs separately. Based on the above, the Company also does not believe it would be meaningful to the Company's investors and readers of its financial statements.

Finally, based on the Company's experience, the Company believes its

presentation of costs associated with the Company's research programs, some of which may have been reimbursed or recovered through a collaborative contract or government grant, is consistent with industry practice.

NOTE 2 -- SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, PAGE F-7

REVENUE RECOGNITION, PAGE F-11

39. YOU DISCLOSE ON PAGE 41 THAT LICENSE FEES AND RELATED ROYALTY PAYMENT REVENUES DECREASED TO $242,000 IN 2005 FROM $392,000 IN 2004 SUBSTANTIALLY DUE TO A CHANGE IN YOUR ASSESSMENT REGARDING THE COLLECTIBILITY OF CERTAIN LICENSE FEES AND ROYALTY PAYMENT DUE FROM A RELATED PARTY. PLEASE TELL US THE FACTORS THAT LED TO YOUR CHANGE IN ACCOUNTING POLICY FOR LICENSE AND ROYALTY PAYMENTS DUE FROM RELATED PARTIES FROM AN ACCRUAL BASIS TO A CASH BASIS. PLEASE ALSO TELL US WHAT PORTION OF SUCH REVENUES RECOGNIZED IN EACH PERIOD PRESENTED HAVE BEEN COLLECTED.

RESPONSE: Due to a worsening financial condition, uncertainty around regulatory approval for Tepha's first product and the outlook for Tepha's business and the related conclusion the Company formed with respect to the impairment of its investment in Tepha, the Company concluded in the later half of 2005 that the revenue recognition criteria of collectibility being reasonably assured could not be satisfactorily met. Accordingly, a change was needed in the Company's accounting for any license fees and royalty payments from Tepha to a cash basis. Please also refer to the response to comment 45 which gives the details related to the Company's assessment that the carrying value of its investment in Tepha was impaired.

All amounts presented in the financials during 2003, 2004 and 2005 have been collected.

NOTE 3 - SIGNIFICANT COLLABORATIONS, PAGE F-7

40. PLEASE TELL US THE FACTORS YOU CONSIDERED IN DETERMINING THAT THE ELEMENTS OF YOUR AGREEMENTS WITH ADM ARE INSEPARABLE UNDER EITF 00-21. PLEASE DISCLOSE THE SIGNIFICANT DELIVERABLES THAT YOU ARE REQUIRED TO COMPLETE UNDER THE AGREEMENTS.

RESPONSE: The Company advises the staff that in determining that the elements of its agreements with ADM are inseparable, the Company considered paragraph 9 of EITF 00-21 which states:

"In an arrangement with multiple deliverables, the delivered item(s) should be considered a separate unit of accounting if all of the following criteria are met:

a. The delivered item(s) has value to the customer on a standalone basis. That item has value on a standalone basis if it is sold separately by any vendor or the customer could resell the delivered item(s) on a standalone basis. In the context of a customers ability to resell the delivered item(s), the Task Force observed that this criterion does not require the existence of an observable market for that deliverable(s).

b. There is objective and reliable evidence of the fair value of the undelivered item(s).

c. If the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item(s) is considered probably and substantially in control of the vendor."

EITF paragraph 10 states, "The arrangement consideration allocable to a delivered item that does not qualify as a separate unit of accounting within the arrangement should be combined with the amount allocable to the other applicable undelivered items within the arrangement. The appropriate recognition of revenue should then be determined for those combined deliverable as a single unit of accounting."

The ADM Agreement requires multiple deliverables during the Technology Alliance and Option Agreement and the Commercial Alliance Agreement. These deliverables include:

DELIVERABLES UNDER THE TECHNOLOGY ALLIANCE AND OPTION AGREEMENT

- License to use the Company's technology

- Continuation of research and development (including certain Recovery Services)

DELIVERABLES UNDER THE COMMERCIAL ALLIANCE AGREEMENT

- During the construction of the Commercial Manufacturing Facility:

  - Continuation of license to use the Company's technology and research and development

  - Manufacturing of pilot product

  - Development of the commercial market for the PHA Natural Plastics on behalf of the JSC

  - Arrange for and finance the acquisition or construction of a facility in which it will formulate PHA materials or arrange for third parties to formulate the PHA Natural Plastics

- Upon the commencement of commercial sales:

  - Continued license to use the Company's technology

  - Additional services to be performed on behalf of the JSC, including research and development, sales, marketing, technical service sales support, and product development, amongst others

  - Formulation services

The Company considered the guidance in EITF 00-21 discussed above when determining that the deliverables in the arrangement did not qualify as separate units of accounting. The initial license deliverables under the Technology Alliance and Option Agreement do not have standalone value since they do not have any value to ADM outside of the ongoing activities during the development and commercialization periods. Additionally, although deliverables under the Commercial Alliance Agreement may have stand-alone value, the Company determined that there is not sufficient objective and reliable evidence of the fair value of the undelivered elements, including the formulation services, sales and marketing activities and technical support, amongst others. Furthermore, at this stage of the arrangement, we consider many of these services to be substantive and highly specialized whereby we are in a unique position to provide these services to the JSC under the alliance and which also contributes to a current inability to determine fair value for these services.

We have revised the disclosure in Footnote 3 in response to the comment.

41. YOUR POLICY WITH RESPECT TO UP-FRONT PAYMENTS IS TO DEFER THE PAYMENTS AND "RECOGNIZE [THEM] OVER THE PERIOD OF PERFORMANCE OF UNDELIVERED SERVICES OR AS UNDELIVERED ITEMS ARE DELIVERED." ON PAGE 37 YOU STATE THAT THE DEFERRED REVENUES RELATED TO PAYMENTS RECEIVED FROM ADM "WILL BE RECOGNIZED IN FUTURE PERIODS AFTER THE COMMENCEMENT OF PRODUCT COMMERCIALIZATION AND AS THE FINAL DELIVERABLES UNDER THE ARRANGEMENT ARE BEING COMPLETED." PLEASE REVISE YOUR DISCLOSURE ON PAGES 37 AND F-11 TO CLARIFY WHETHER YOU INTEND TO RECOGNIZE THE DEFERRED REVENUE RELATED TO ADM, INCLUDING MILESTONE PAYMENTS, ONLY ONCE ALL DELIVERABLES UNDER THE ARRANGEMENT ARE COMPLETED OR USING A TIME-BASED METHOD FOLLOWING THE COMMENCEMENT OF PRODUCT COMMERCIALIZATION.

RESPONSE: The Company advises the Staff that the prospectus has been revised on pages 37 and F-17 in response to the Staff's comment.

As discussed in the Company's response to comment 40, the arrangement with ADM includes multiple elements including an obligation for the Company to provide a number of services to the JSC in the commercial phase of the agreement, including formulation services and certain sales and marketing activities, amongst others. However, these elements cannot be separated for accounting purposes under the provisions of EITF 00-21.

While there is no clear guidance as to how to account for situations where there are multiple "economic" deliverables but only one "accounting" deliverable, the Company concluded it is most appropriate to begin the recognition of the revenue as these services are being provided, as that is when there are no longer any future deliverables . We believe this is consistent with guidance provided informally by the Staff of the SEC in the past.

Given the complexity of the arrangement, the exact form and timing of completion of the final deliverable(s) is not currently known, however, the Company believes many of the deliverables will have been provided at the time of the first commercial sale of the product. We do however, expect to continue to provide formulation services (a key step in the ultimate production of the PHA Natural Plastics) and certain other sales and marketing services for a period of time after first commercial sale and potentially for the duration of the Commercial Alliance agreement. Therefore, the Company believes that recognition of amounts previously deferred will commence at approximately the time of the first commercial sale of the product and will be recognized proportionately over the period that these final services are provided over the remaining term of the Commercial Alliance Agreement. In addition, we will continue to evaluate on an on-going basis whether fair value for the undelivered items can be determined in the future and adjust the timing of our revenue recognition accordingly.

42. YOU INDICATE THAT UNDER CERTAIN CONDITIONS YOU MAY BE REQUIRED TO REFUND A PORTION OF THE REIMBURSEMENTS RECEIVED FROM ADM UNDER THE TECHNOLOGY ALLIANCE AND OPTION AGREEMENT. PLEASE DISCLOSE THE CONDITIONS UNDER WHICH YOU WOULD BE REQUIRED TO REFUND REIMBURSEMENTS RECEIVED FROM ADM.

RESPONSE: The Company advises the Staff that the prospectus has been revised in response to the Staff's comment such that the financial statements now include disclosure of the conditions under which the Company would be required to refund reimbursements received from ADM. The Company notes that if the Technology Alliance was terminated without ADM exercising its Option to enter into a commercial alliance, the Company would have been required to refund to ADM a portion of these reimbursements.

43. PLEASE FILE THE NOVEMBER 3, 2004 TECHNOLOGY ALLIANCE AND OPTION AGREEMENT AS AN EXHIBIT TO YOUR FORM S-1.

RESPONSE: The Company advises the Staff that the Technology Alliance and Option Agreement is no longer in effect upon the Company and ADM Polymer Corp. entering into the Commercial Alliance Agreement and that all operative terms are contained in the Commercial Alliance Agreement. The Company also advises the Staff that the Technology Alliance and Option Agreement has been filed as an exhibit to Amendment No. 1 along with a separate request for confidential treatment thereof.

NOTE 6 - ACCRUED EXPENSES, PAGE F-21

44. IF TRUE, PLEASE CONFIRM THAT THERE ARE NO ITEMS INCLUDED IN OTHER ACCRUED EXPENSES IN EXCESS OF 5% OF TOTAL CURRENT LIABILITIES THAT REQUIRE DISCLOSURE IN ACCORDANCE WITH RULE 5.02 OF REGULATION S-X.

RESPONSE: The Company confirms that there are no items included in other accrued expenses in excess of 5% of total current liabilities that require disclosure in accordance with Rule 5.02 of Regulation S-X for the years ended 12/31/04, 12/31/05, and the quarter ended 3/31/06.

NOTE 8 - RELATED PARTY TRANSACTIONS, PAGE F-22

45. PLEASE TELL US THE FACTORS THAT YOU CONSIDERED IN DETERMINING THAT YOUR INVESTMENT IN TEPHA, INC. BECAME IMPAIRED IN 2005. WE NOTE THAT YOU RECOGNIZED LICENSE AND ROYALTY REVENUES ON THIS INVESTMENT OF $112,800 IN 2003, $316,900 IN 2004 AND $139,900 IN 2005. PLEASE TELL US THE ASSUMPTIONS YOU USED TO DETERMINE THE FAIR VALUE OF YOUR INVESTMENT IN TEPHA, INC.

RESPONSE: During 2003, the Company agreed to acquire 648,149 shares of Tepha, Inc. Series A Preferred Stock in exchange for a $700,000 license

payment. The $1.08 price per share paid by the Company represented the fair-market value of the stock as of that date, as it was equal to the cash price per share paid by third-party investors. During 2004, Tepha sold additional shares at the same $1.08 per share price valuation used for the 2003 financing from existing and new investors in Tepha.

Tepha's lead product was turned down for approval by the FDA, and the company had submitted an appeal with the FDA in 2006, but has not had a conclusive response. In early 2006 existing investors arranged for a bridge loan to finance the company until the end of 2006, in order for Tepha to seek additional FDA approvals for this product.

While Tepha was able to obtain some bridge financing from its existing investors to remain operational during 2006, the bridge financing is senior to the equity of the company. Tepha is unable to raise equity capital at this time, and there is uncertainty about the company's ability to obtain additional, future equity-based financings. While Tepha is seeking to appeal FDA approval for its lead product and could get the product approved, significant uncertainty remains. Given these negative business developments at Tepha, which occurred primarily in the second half of 2005, and the level of uncertainty with respect to the recoverability of the Company's investment, the Company reassessed its investment in Tepha and determined the carrying value for the Tepha stock to be of nominal value at December 31, 2005.

NOTE 11- STOCK COMPENSATION PLANS, PAGE F-33

46. PLEASE PROVIDE US WITH AN ANALYSIS OF THE STOCK-BASED COMPENSATION THAT YOU GRANTED FROM JANUARY 1, 2005 THROUGH THE DATE OF YOUR RESPONSE LETTER. YOUR ANALYSIS SHOULD ALSO INCLUDE ANY OUTSTANDING INSTRUMENTS TO WHICH YOU ARE APPLYING VARIABLE ACCOUNTING. TELL

US HOW YOU DETERMINED THE FAIR VALUE OF YOUR COMMON STOCK AT EACH RELEVANT DATE. TO THE EXTENT APPLICABLE, PLEASE RECONCILE THE FAIR VALUES YOU DETERMINED FOR YOUR COMMON STOCK TO CONTEMPORANEOUS EQUITY TRANSACTIONS AND THE ANTICIPATED IPO PRICE RANGE.

RESPONSE: The Company has historically granted stock options at exercise prices equivalent to the fair value of the Company's common stock as determined by its board of directors, with input from management, as of the date of grant. Because there has been no public market for the Company's common stock, the board of directors determined the fair value of the Company's common stock by considering a number of objective and subjective factors, including its operating and financial performance and corporate milestones, the prices at which it sold shares of convertible preferred stock, the superior rights and preferences of securities senior to its common stock at the time of each grant and the risky and non-liquid nature of its common stock. The Company has not historically obtained contemporaneous valuations by an unrelated valuation specialist because, at the time of the issuances of stock options, the Company believed its estimates of the fair value of the Company's common stock to be reasonable based on the foregoing factors.

The Company retrospectively re-assessed the valuation of its common stock at December 31, 2005 using an independent third party valuation consulting firm. There was an immaterial difference of $0.06 between the original board determined fair value and the re-assessed valuation of the common stock related to the grants made during December 2005. Therefore, the Company has not made any retrospective adjustments to its accounting for stock options. In making this determination, the Company has reviewed the valuation methodologies outlined in the AICPA's PRACTICE AID VALUATION OF PRIVATELY-HELD-COMPANY EQUITY SECURITIES ISSUES AS COMPENSATION, which the Company refers to as the "Practice Aid", and the Company believes that the valuation methodologies it has employed are consistent with the Practice Aid.

In 2006, determining the fair value of the Company's stock has required complex and subjective judgments. Updated third party valuations were obtained in June 2006 and July 2006. The Company's approach to valuation of the enterprise was based on a discounted future cash flow approach that uses the Company's estimates of revenue, driven by assumed market growth rates, and estimated costs as well as appropriate discount rates. As the Company reached multiple risk altering milestones during the first half of 2006, different discount rates were considered as the Company made the

transition from a venture stage research enterprise to a growing company with a viable path to commercialization. The estimates used are consistent with the plans and estimates that the Company uses to manage the business. The enterprise value was then allocated to preferred and common shares using the option-pricing method, which involves making estimates of the anticipated timing of a potential liquidity event such as a sale of the Company or an initial public offering, and estimates of the volatility of the Company's equity securities. The anticipated timing is based on the plans of the Company's board and management. Estimating the volatility of the share price of a privately held company is complex because there is no readily available market for the shares. The Company estimated the volatility of its stock based on available information on volatility of stocks of comparable publicly traded companies in the industry. Had the Company used

different estimates of volatility, the allocations between preferred and common shares would have been different.

With respect to the December 31, 2005 valuation, the Company did not have the financial capacity to execute a successful commercial strategy without a partner to commit the spending required to achieve a successful commercial strategy. Even though there were ongoing discussions with ADM around exercising the Commercial Alliance Agreement and providing the financial support to build a commercial scale plant to produce material for commercial sales, there were significant doubts about whether ADM would proceed. In particular, ADM's management did not decide to bring the project to their board of directors until mid-January 2006. Lacking a significant commercialization partner such as ADM and the ratification and credibility to the Company's technology that accompanies such an alliance, along with the potential revenue and funding from such a relationship, as well as the loss of a significant potential equity investor in early January, there was significant uncertainty regarding the Company's ability to raise substantive levels of cash from new equity financing was limited. If ADM had failed to exercise the Commercial Alliance Agreement, the marketability of the Company's technology would have been impaired, and its ability to remain a going concern would have been jeopardized. The valuation reflected these risks in its assumptions of discount rates and volatility. The Company also had a limited supply of cash to fund ongoing operations. The high risk nature of the Company at that stage resulted in significantly more of the value of the Company being assigned to the preferred stock which has liquidation preferences, participation rights and conversion rights than to the common stock. As suggested in the Practice Aid, the Company employed a Black Scholes option pricing analysis in its determination of the value of common stock. In January of 2006, the Company raised additional capital utilizing preferred stock and the pricing of that issuance was in line with the valuation of preferred on 12/31/05. The 12/31/05 valuation analysis suggested an average preferred stock value of $5.47. On January 19th, preferred stock was issued at a per share price of $6.00, which is in line with the average preferred value since this issuance had participation rights and was therefore superior to several of the earlier preferred rounds included in the average that did not have such rights.

In January 2006 and prior to the closing of the Company's January capital raising, the Company's other significant partner, BP, terminated the collaborative agreement they had with the Company on its next most advanced program in switchgrass. During the first quarter of 2006, ADM management declined to enter the Commercial Alliance pending satisfactory resolution of certain regulatory issues. In addition, ADM underwent a significant management change and a new uncertainty was introduced as it was unclear what changes in strategy, if any, their new CEO would pursue. ADM however did make a milestone payment in May, 2006, but did not commit to future investment or involvement pending resolution of the regulatory issues. These developments and the preferred shares issued in January were considered in the contemporaneous third party independent valuation done in June 2006. At that time, there continued to be a regulatory hurdle, but the successful financing round and the receipt of the milestone payment from

ADM reflected positive developments in the Company's ongoing relationship with ADM and a continued interest in potentially signing the commercial agreement and a greater likelihood of an initial public offering some time in the future. While these developments reflected progress, the risk of regulatory issues and the failure to secure a signed partnership agreement meant that there remained significant risk that the commercialization strategy would not move forward or would be significantly delayed. Consequently, discount rates considered in the Company's valuation were reduced but remained above levels that would be appropriate for a company that is a candidate for an initial public offering.

Another contemporaneous valuation by the independent third party was completed at the end of July 2006. In July, the Company and ADM signed the Commercial Alliance Agreement whereby ADM committed to build a plant to commercialize the technology. With a signed agreement, the likelihood of a public offering of the common stock also increased dramatically. Based on feedback from the Company's underwriters, a signed Commercial Alliance Agreement with ADM was a gating item to their support of an initial public offering. These changes in the risk of the Company were incorporated into the valuation analysis. Like the December and the June valuation, the July analysis was based on an option analysis consistent with the Company's earlier valuations in which more of the value of the Company was assigned to the preferred stock, which has liquidation preferences and participation rights, than to the common stock. While the prospects for an IPO had increased with ADM's execution of the Commercial Alliance Agreement, equity market conditions were weak at that time, which raised uncertainties around completing a successful IPO and the pricing at which such an offering might be completed.

The Company will supplementally provide the Staff with a table that summarizes the changes in value as the Company went from a technology phase and the events to achieving a key partnership with ADM to develop the product commercially and provide the Company with a future path towards commercial viability. The ADM alliance, and in particular entering into the commercial stages of this relationship with the signing of the Commercial Alliance Agreement in July, drove a significant increase in value as the likelihood of a viable commercialization increased significantly. The table supplementally provided lists the Company's option grant activity from 2005 through July, 2006 and includes the assessed fair value and the milestones considered that impacted the Company's assessment of fair value of its common stock.

The independent valuation on the July 28, 2006 pricing reflects the continued uncertainty that a successful IPO will take place and that the underwriter's pricing range of $9.80 to $11.44 will be realized and in case a successful IPO is not completed, new funding can be raised under the valuation represented by the underwriters current expectation. The assessed fair value was determined by the board of directors of the Company and the compensation committee thereof after evaluation of all relevant information including independent valuations procured by third parties.

If you require additional information, please telephone either John M. Mutkoski at (617) 570-1073 or the undersigned at (617) 570-1393.

Sincerely,

/s/ Robert E. Puopolo
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Robert E. Puopolo

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