
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2015;

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 001-33133

METABOLIX, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)	04-3158289 (I.R.S. Employer Identification No.)
21 Erie Street Cambridge, MA (Address of principal executive offices)	02139 (Zip Code)

(Registrant's telephone number, including area code): **(617) 583-1700**

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Name of exchange on which registered</u>
Common Stock, par value \$.01 per share	The NASDAQ Stock Market LLC (NASDAQ Capital Market)

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of Act). Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold on the NASDAQ Capital Market on June 30, 2015 was \$34,710,394.

The number of shares outstanding of the registrant's common stock as of March 23, 2016 was 27,369,390.

DOCUMENTS INCORPORATED BY REFERENCE

None

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For the Year Ended December 31, 2015
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Forward Looking Statements

This annual report on Form 10-K contains "forward-looking statements" within the meaning of 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These statements relate to our future plans, objectives, expectations and intentions and may be identified by words such as "may," "will," "should," "expects," "plans," "anticipate," "intends," "target," "projects," "contemplates," "believe," "estimates," "predicts," "potential," and "continue," or similar words.

Although we believe that our expectations are based on reasonable assumptions within the limits of our knowledge of our business and operations, the forward-looking statements contained in this document are neither promises nor guarantees. Our business is subject to significant risk and uncertainties and there can be no assurance that our actual results will not differ materially from our expectations. These forward looking statements include, but are not limited to, statements concerning the Company's business plans and strategies; expectations for PHA biopolymer manufacturing; expected market demand and commercialization plans for the Company's PHA biopolymer products; expected future financial results and cash requirements; plans for obtaining additional funding; plans and expectations that depend on the Company's ability to continue as a going concern; potential future collaborations and the planned spin out of our crops program; and expectations for future research, product development and collaborations. Such forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated including, without limitation, risks related to our limited cash resources, uncertainty about our ability to secure additional funding, dependence on establishing a manufacturing source for our PHA performance biopolymers, risks related to the execution of our business plans and strategies, risks associated with the protection and enforcement of our intellectual property rights, as well as other risks and uncertainties set forth below under the caption "Risk Factors" in Part I, Item 1A, of this report.

The forward-looking statements and risk factors presented in this document are made only as of the date hereof and we do not intend to update any of these risk factors or to publicly announce the results of any revisions to any of our forward-looking statements other than as required under the federal securities laws.

Unless the context otherwise requires, all references in this Annual Report on Form 10-K to "Metabolix," "we," "our," "us," "our company" or "the company" refer to Metabolix, Inc., a Delaware corporation and its subsidiaries.

PART I

ITEM 1. BUSINESS

All dollar amounts are stated in thousands.

Overview

Metabolix is an advanced biomaterials company focused on delivering sustainable solutions to the plastics industry. 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 our biotechnology research with real world chemical engineering and industrial practice. In addition, we have created an extensive intellectual property portfolio to protect our innovations which, together with our technology, serves as a valuable foundation for our business.

Metabolix was formed to leverage the ability of natural systems to produce complex biopolymers from renewable resources. We have focused on a family of biopolymers found in nature called polyhydroxyalkanoates ("PHAs"), which occur naturally in living organisms and are chemically similar to polyesters. We have demonstrated the production of our PHAs from pilot to industrial scale and we have sold our PHA products commercially since 2012.

Our targeted markets offer substantial opportunity for innovation and value creation. Our strategy is based on the performance and differentiation of our materials. We aim to address unmet needs of our customers and leverage the distinctive properties of our proprietary PHA biopolymers to improve critical product qualities of material systems and enable our customers to enhance the value of their products and/or achieve cost savings through their value chains. As such, we are positioning our biopolymers as advanced specialty materials that offer a broad and attractive range of product and processing properties compared to other bioplastics or performance additives. We believe that a substantial global market opportunity exists to develop and commercialize our advanced biopolymer product technology.

In 2014, we conducted a comprehensive strategic review of our business and decided to focus the Company's resources on commercializing PHA performance biopolymers. In connection with this more focused business strategy, in 2014

we discontinued our operations in Germany and sold substantially all of the assets of our wholly-owned German subsidiary, Metabolix GmbH. We suspended work in a program that was developing processes for producing biobased chemicals from PHAs and we are planning to spin out our crop science program—a research program focused on crop yield improvement and the production of PHAs in crops using agricultural biotechnology.

In making this pivot, we took measures to reshape the Company and created a new model for our approach to commercial development of our biopolymers as specialty materials rather than bulk plastics. We are now targeting our research, development and commercial resources on the use of our Mirel® PHA biopolymers as performance additives in a range of applications where they can improve performance and/or reduce cost in other material systems such as polyvinyl chloride (“PVC”) and polylactic acid (“PLA”). In PVC additives, we are focusing on opportunities where our PHA biopolymers are used as property modifiers or process aids. We are also targeting applications where the performance, biodegradability, biocontent and other attributes of our PHA biopolymers provide unique functional advantages, such as biodegradation, required by such applications, including PHA resins for molded articles and films, as well as PHA latex and other PHA coatings for paper and cardboard.

In early 2015, we significantly increased the nameplate capacity at our contracted pilot manufacturing facilities to 600,000 pounds per year of our Mirel PHA biopolymers. In connection with this plan, we entered into multi-year agreements with the operator of our pilot recovery facility and with a toll contractor for fermentation services. The initial focus of this manufacturing plan is production of the Company’s a-PHA (amorphous, low Tg rubber) biopolymer for use in ongoing development and commercialization activities based on this unique PHA product. We intend to use this new PHA material, together with existing inventory, to support both market development and initial customer conversions as we continue working to build our PHA performance biopolymers business. The capital expansion at our pilot recovery facility was completed in 2015. We anticipate operating our pilot plant at nameplate capacity during 2016. We expect to sell the bulk of this a-PHA material to customers for commercial applications mainly as performance additives for PVC and PLA. We also plan to maintain a stream of a-PHA supply for continued market development with a view to building the base for commercial scale biopolymer operations as we continue evaluating and developing production expansion options.

Based on our commercial progress in 2015, we are accelerating our efforts to secure our first commercial production line focusing on annual capacity of up to 10 kilo tonnes (KT) or approximately 22 million pounds. Operating at commercial scale would represent a key milestone in establishing a successful specialty biopolymers business. This capacity would also serve as a stepping stone to the establishment of an additional commercial scale production, likely in units of 20 KT, or approximately 44 million pounds. In 2016, we expect to be actively engaged in developing manufacturing options for our first tranche of commercial scale capacity. Our goal is to leverage existing industry assets and capabilities where possible and to secure this capacity in a capital-efficient manner with a manufacturing partner.

We are focused on building our customer base to support the successful commercial development of our business. To that end, we have intensified our efforts in product and application development and are continuing to enhance our capabilities in this area. We are also working closely with customers across a range of applications to understand the processing and performance profiles for their products, and are pursuing commercial opportunities with customers at various levels of maturity from initial data demonstration and product and process validation, through to larger scale trials, product testing, product qualification and product launch.

This approach is integral to our specialty materials strategy, where the market opportunities are driven by the important value-adding role our biopolymers can play as components of other material systems or by bringing unique functional advantages such as biodegradability to customer applications. This is a critical area of focus for us and our success depends on working effectively with customers to identify uses and applications for our PHA biopolymers that substantiate the commercial potential for our products.

In 2015 we continued to work on customer projects across our target applications spaces—PVC processing aids and property modifiers, PLA modification, functional biodegradation and coatings for paper. During the year, we reported initial customer conversions for several smaller customers and we made progress advancing complex development programs for several larger opportunities. We also secured a significant commercial conversion with Kolar Filtration in the area of functional biodegradation. Specifically, we signed a global, exclusive distribution agreement with Kolar for PHA-based denitrification pellets used in ornamental and hobby aquaria, ornamental ponds, fish hatcheries, and commercial aqua farming. In the area of PVC modification, we secured our first commercial order from a new customer for a-PHA used in a PVC flooring application—protective vinyl floor tiles sold in major home improvements stores. In 2016, we will continue to work closely with customers across our target application spaces to successfully complete development programs and to convert them to repeat, commercial sales.

Our crop science program has been a technically challenging long-term effort, initially directed toward the production of PHA in plant crops. Based on our observations in this research, we began refocusing our crop science program around new genetic and informatics tools and intellectual property for enhancing the photosynthetic capacity of plants. In 2015, we

launched our refocused crop science program under the name “Yield10 Bioscience.” We are seeking to spin out Yield10 into a separately funded venture focused entirely on the further development and commercialization of these technologies, and we have begun talking to potential investors and industry collaborators regarding the opportunity to participate in the venture. We have also named a scientific advisory board to provide technical advice and industry experience to Yield10.

The Company was successful during 2015 in raising \$14,703, net of offering costs, through a private placement of common stock and warrants. Further, on October 7, 2015, the Company entered into a common stock purchase agreement with Aspire Capital Fund, LLC (“Aspire”). Under terms of the agreement, Aspire has committed to purchase up to \$20,000 of Metabolix’s common stock over a 30 month period that began on November 9, 2015. Common stock may be sold to Aspire from time to time at the Company’s option under pricing formulas based on prevailing market prices around the time of each sale. The Company expects to use the Aspire facility to complement, rather than replace, other financing that may be required to continue the Company’s operations and support its capital needs. The timing, structure and vehicles for obtaining future financing are under consideration, but there can be no assurance that such financing efforts will be successful. The Company intends to use the proceeds of its recent and any future financings for general corporate purposes and working capital requirements, including the continued development of its specialty biopolymers business as the foundation for its longer range commercial scale plans and the future growth of its business.

Recent Developments

In furtherance of the Company’s efforts to secure its first tranche of commercial scale specialty PHA manufacturing capacity, in late 2015 and early 2016, Metabolix and CJ CheilJedang Corporation (“CJ”) undertook a comprehensive feasibility study and assessment of CJ’s existing lysine production facility at Fort Dodge, Iowa as a potential site for specialty PHA production. This assessment included the generation of preliminary engineering plans for the modification of existing fermentation assets as well as the construction of a new biopolymer solvent recovery unit on the site. With the successful conclusion of the feasibility study and engineering plans, we entered into a Memorandum of Understanding (“MOU”) with CJ for a strategic collaboration that would include a commercial manufacturing arrangement for specialty PHAs, including our newly launched amorphous a-PHA biopolymer. Under this non-binding MOU, the companies have agreed to work together toward the successful conclusion of definitive agreements for a collaboration under which CJ will fund, construct and operate a 10 kilo tonne PHA production unit at the Fort Dodge facility based on Metabolix’s PHA technology. CJ is finalizing a detailed budget for the capital investment needed to establish the PHA unit at Fort Dodge. Under the contemplated definitive agreements, Metabolix will buy the specialty PHAs produced at the Fort Dodge facility from CJ, and will market and sell the materials to its commercial customers. The companies also expect to define a framework for potential longer term expansion of the collaboration to larger scale PHA production and related commercial activities. The companies will work together over the coming months to complete definitive agreements for the collaboration and hope to have the PHA production unit up and running at Fort Dodge within 18-24 months. However, there can be no assurance that definitive agreements will be concluded on terms satisfactory to the Company, if at all, or that the project can be completed in the indicated timeframe.

Our Technology and Core Capabilities

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 to support manufacturing of our PHA biopolymers. In particular, we believe we have unique capabilities with respect to harnessing the metabolic pathways involved in the production of a wide range of bioplastic monomers and the ability to polymerize, accumulate and harvest these bioplastics from living cells. We are also continuing to develop key capabilities in the areas of biopolymer product development and customer focused applications development and technical support.

We have demonstrated that our technology and core capabilities enable 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;
- integrate those organisms into reliable, large scale industrial fermentation processes;
- develop highly efficient recovery technology to separate the end product from the fermentation broth;
- tailor the properties of our end product to suit customer needs;
- develop new applications and commercial opportunities for these products;

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- develop new formulations and compounds based on these products; and
- provide sales and technical support to our customers who use these products.

Product Development Process

Biology and Genetic Engineering

We have identified and chromosomally inserted into organisms a series of genes to produce several enzymatic proteins, and have done so in such a way that they are expressed to execute a series of reactions in a balanced manner to produce PHAs with controlled structures and performance as the end-product of interest. We believe that we have advanced capabilities based on over 20 years of development, taking early stage gene/pathway discovery through the entire development and scale-up process and final implementation of that technology at commercial scale using robust industrial microbial production systems. We believe these capabilities enable us to produce specialty PHA biopolymers with unique properties.

Industrial Fermentation Process Engineering

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 inform microbial design and where microbial engineering approaches can guide the fermentation group to structure the optimal protocols (recipes) for running fermentations. Based on this technology we have demonstrated the ability to produce a range of different biopolymers on a common fermentation platform.

Chemical Process Engineering for Biopolymer Recovery

Another element of our product development process involves process chemistry and chemical engineering to separate the biopolymer from the biological cell material once fermentation is complete. We have a dedicated team that has developed a proprietary process for recovery of PHA biopolymer. That process produces PHA biopolymer at a high level of purity without damaging the structure of the polymer and has operated effectively at a commercial scale. We have successfully demonstrated our ability to efficiently isolate the range of polymers necessary to meet and expand our range of target applications. These polymers can be routinely produced free from cell debris and processed into high quality biomaterials.

Polymer Science and Product Development

In the area of biopolymers, our product development process involves tailoring polymer properties and polymer blends to provide the desired end product properties and meet the processing requirements for specific customer applications. During 2015 we further expanded our capabilities and facilities to evaluate PHAs as modifiers and process aids in targeted PVC and PLA applications. We also upgraded facilities to develop functional biodegradation products with controlled degradation profiles based on specific customer application needs. Our product development team has considerable expertise in polymer science and to date has developed advanced formulation and processing technology for a wide variety of customer applications and processing methods. We are continuing to work with customers and channel partners to optimize our polymers and polymer formulations as we commercialize our products in target applications.

In summary, we believe we have successfully integrated capabilities in biology, genetics, fermentation process engineering, chemical engineering and polymer science to provide high value biobased and biodegradable polymer solutions for customers. We believe this integrated set of capabilities will be a source of competitive advantage as our business develops.

Business Strategy

Our goal is to build a commercially successful specialty biopolymers business, with attractive margins, based on the unique properties of our PHA biopolymers. To achieve this goal, we are developing and commercializing biopolymers in a range of applications. We believe this will lead to attractive commercial opportunities for the Company, create value for our business and our customers and generate leading intellectual property positions in the field.

Key elements of our strategy include:

Proprietary Biopolymers and Biopolymer Formulations. Our strategy is to deliver solutions to customers in specialized market segments that can be served competitively by the distinctive properties of our biopolymers and biopolymer

formulations. Our biopolymer products may be biobased or biodegradable, or both, and will be used where their unique physical properties and processing capabilities provide a competitive advantage. Through several years of interaction with customers, we have developed biopolymers and biopolymer formulations suitable for a variety of applications and processing methods. We are now focusing on developing biopolymers as performance additives, property modifiers or processing aids for existing polymer systems such as PVC, PVC recycle and PLA. In these high value applications our PHA technology may enhance processing, properties and performance of PVC and recycled PVC, as well as increase performance of PLA while retaining clarity, biocontent and compostability of the resulting material. We are also targeting applications where the performance, biodegradability, biocontent and other attributes of our PHA biopolymers provide unique functional advantages, such as biodegradation, required by such applications, including PHA latex and other PHA coatings for paper and cardboard, and PHA resins for films and molded articles.

Managing Existing Inventory. We expect to work closely with core customers to provide them with access to existing inventory acquired from Telles, our former joint venture with Archer Daniels Midland Company ("ADM"), as well as newly produced amorphous PHA material from our pilot facilities, until a commercial scale supply chain is established. In the near term, we plan to focus our existing inventory and pilot amorphous PHA biopolymer material on initial customer conversions in targeted, high value applications for our PHA biopolymers and on ongoing product development activities.

Matching Manufacturing Capacity to Customer Demand. We completed a capital project in 2015 to expand our pilot recovery operations to an annual nameplate capacity of 600,000 pounds of amorphous PHA biopolymer. In conjunction with this expansion, we secured a contract with a U.S. fermentation supplier for supply of fermentation broth. In the second half of 2015, we began taking delivery of fermentation broth at our expanded pilot recovery facility and continued to ramp up capacity into the end of the year. We expect to operate the pilot plant at nameplate capacity in 2016 and use the material to supply commercial customers as well as to provide a stream of material to continue to initiate and advance customer development projects.

Transitioning to the Specialties Commercial Launch Phase. With increasing clarity on customer conversions and confidence in market development, we are accelerating our efforts to secure our first tranche of commercial scale manufacturing capacity for our amorphous PHA biopolymer materials. We are actively engaged in developing manufacturing options for our first tranche of commercial-scale production capacity as this is a key element of the supply chain necessary to support our longer-term business strategy. We are targeting the establishment of up to 10 KT of production capacity as a first step in commercial scale production to support our specialties strategy. Our goal is to move quickly, leverage existing industry assets and capabilities where possible and to secure the capacity in a capital-efficient way with a production partner. The capacity may be accomplished in stages, depending on the specific infrastructure available and optimal project structure. Securing capacity at this level is expected to enable a-PHA biopolymer product sales that will partially offset our operating costs and helps to establish the business base for expanded operations as we continue working to build a commercially successful specialty biopolymers business.

Market Positioning and Technical Support. We have focused our technical and business development team on support of existing customers and development of the prospective customer base for our PHA biopolymers. We are positioning our biopolymers as premium priced, specialty materials that are also environmentally attractive relative to petroleum-based polymers and lower performance bioplastics. These efforts are directed at managing a pipeline of customer opportunities across a range of applications, and we are working to build strong customer relationships and committed demand for our PHA biopolymers as we establish the supply chain required to support the demand.

Microbial Research and Process Development. We have identified and continue to develop opportunities to improve our PHA strains and our fermentation and recovery processes. We believe significant reductions in the operating and capital cost of PHA production, as well as meaningful advances in PHA biopolymer properties and performance, can be achieved as we successfully exploit these opportunities. We believe our technology is robust and we expect to be able to successfully transfer improvements from microbial research and process development to commercial scale production.

Leading Intellectual Property Position. We have built a patent estate around our platform technologies and a variety of inventions relevant to the commercialization of PHA biopolymers. We continue to extend this patent estate within our core business and around other commercial opportunities in the areas of biopolymers, chemicals and crops. We have licensed our technology, and where appropriate, we will continue to explore opportunities to license our technology to others as a way to advance our business strategy or capitalize on our technology both within and outside our targeted areas of interest.

Advancing Crop Biotechnology. We believe we are pioneering innovative technologies for introducing multigene traits and enhanced carbon efficiency into plants through the research we are pursuing in Yield10 Bioscience. We believe these technologies have the potential to significantly increase the yield in food, feed and biomass crops. We are planning to spin out

this activity into a separately funded venture focused entirely on further development and commercialization of these technologies and have begun talking with potential investors and agriculture industry collaborators about participation in the venture.

Market Opportunity

Our target markets and product applications offer substantial opportunity for innovation and value creation. In certain applications, we can position our PHA biopolymers as biobased performance additives that contribute biocontent, while improving the overall performance of material systems. In other applications, our PHA biopolymers can be used to replace conventional plastics based on market drivers for renewable and biodegradable materials that have the potential to reduce the use of petroleum-based feedstocks and decrease plastic pollution in the environment. To that end, we are targeting our resources on the use of our PHA biopolymers as performance additives in a range of applications where they can improve performance and or reduce cost in other material systems such as PVC and PLA. We are also targeting applications where the performance, biodegradability, biocontent and other attributes of our PHA biopolymers provide unique functional advantages, such as biodegradation, required by such applications, including PHA latex and other PHA coatings for paper and cardboard, and PHA resins for films and molded articles.

The Plastics Market

The world's annual consumption of plastic materials has increased from around 5 million metric tons in the 1950s to nearly 311 million metric tons in 2014. Plastics are durable, lightweight and useful in a broad range of applications from packaging to engineering-grade automotive materials, driving continued growth in the plastics market. A majority of these plastics are made from fossil feedstocks, including crude oil and natural gas.

According to Global Industry Analysts, Inc., the global market for PVC is an estimated 39 million metric tons produced annually. PVC is a versatile polymer used in a broad range of applications including construction materials, wire and cable and medical disposables. Significant amounts of additives are used in PVC formulations (typically 20-40% of the formulation) to improve processing, plasticization and performance. Based on industry studies, the property modifier and process aid segment of the current global PVC represents approximately 4.1% of the PVC market based weight or approximately 3.5 billion pounds per annum with an aggregate market value of approximately \$6 billion annually according to management estimates based on these market studies.

The Freedonia Group cites consumer preferences for more sustainable materials and improved performance of bioplastic resins and commodity plastics produced from biobased sources as key factors driving the use and growth of bioplastics, which includes both non-biodegradable plastics such as PET with increased biocontent as well as biodegradable plastics. According to Freedonia, global demand for biobased and biodegradable plastics will grow 19 percent annually to 950,000 metric tons in 2017. Through 2017, starch-based bioplastics and PLA will account for the majority of biodegradable bioplastic demand, followed by other biobased plastics, such as PHA/PHB, cellulose, polybutylene succinate ("PBS") and fossil fuel-based biodegradable plastics, representing approximately 40 percent of global bioplastic demand. According to the German-based research firm nova-Institut, the global production of PLA is currently 180,000 tons per annum and is expected to reach 800,000 tons per annum by 2020. We believe our PHA performance additives for PLA can improve the performance of PLA in a range of potential applications, thereby expanding the market potential for PLA.

It is well established that most fossil feedstock-based plastics do not biodegrade in the environment. Instead, they congest landfills and pollute the land, waterways and oceans. According to the U.S. Environmental Protection Agency, an estimated 32 million tons of plastic entered the U.S. municipal solid waste stream in 2011. It is estimated that approximately 10.5 percent of landfill weight is plastics. In addition, every year approximately 225,000 tons of plastic waste ends up in the world's oceans. We believe our PHA biopolymers, which have excellent biodegradation profiles in composting, soil and marine environments, can contribute to new and alternative waste management solutions.

Biopolymers Platform

Overview

We are focused on building a commercially successful specialty polymers business, with attractive margins, based on the unique properties of our PHA biopolymers. We are targeting market opportunities driven by the important value-adding role our biopolymers can play as components of other material systems. Our commercial development activities have focused on our target application spaces of PVC processing aids and property modifiers, PLA modification, functional biodegradation and paper coating. We are intensifying our efforts in product and application development and working closely with customers across a range of applications at various stages in the development process, from initial data demonstration, through product and process validation, larger scale trials, product qualifications and ultimately commercial purchase decisions. While we work to execute these elements of our strategy, we are managing our existing inventory of PHA biopolymers and our production of new pilot materials to support these development and commercialization efforts, and we are accelerating our efforts to secure commercial scale production as we gain clarity on customer conversions and confidence in market development.

Former Alliance with Archer Daniels Midland Company

Mirel biopolymers were produced successfully at industrial scale for two years under the Telles joint venture with ADM that was in effect from 2004 through 2011. The product was produced at very high quality and in a targeted range of grades suited to different customer uses. In 2015, we successfully deployed our latest amorphous PHA technology into pilot scale production, and we are using this new pilot material, together with inventory we acquired in connection with the dissolution of the ADM alliance, to support our ongoing commercial and development efforts in select target application spaces.

Target Application Spaces for Metabolix Biopolymers

Although we believe there are significant opportunities across many markets and applications, we are initially focusing our commercialization efforts on select application spaces where we think the performance, biodegradability, biocontent and other properties of our PHA biopolymers are a good fit. These are:

- Performance modifiers and process aids for PVC;
- Performance modifiers for PLA;
- Coatings for paper and cardboard; and
- Functional biodegradation (e.g., resins and compounds for films and molded articles for controlled in-situ biodegradation).

We believe these application spaces have unmet needs that can be addressed with our PHA materials. Our biopolymers can enable improved performance qualities and/or reduced cost when used as an additive and blended with other polymers such as PVC and PLA. In addition, certain applications have the need or a preference for materials that are biobased and biodegradable either for branding value, because of regulatory requirements or because biodegradability offers a useful property such as new end-of-life solutions like soil or marine biodegradation, composting or anaerobic digestion. We are engaged in focused product and application development activities in these segments. We are working with potential customers to determine their specific needs and develop end-use markets, and we are in the process of qualifying our materials for certain customer applications.

Performance Additives

We are developing PHA biopolymers as performance additives. Metabolix biopolymer resins are either miscible or highly compatible as a dispersed modifier with a broad range of biobased and petroleum-based materials and can improve a range of performance attributes such as toughness, barrier properties, processability and flexibility through blending with these materials. We are initially focused on developing polymeric modifiers for PVC, a plastic with diverse uses ranging from construction materials to medical applications. Compounded PVC products are typically formulated with significant amounts of additives, which are used to make the PVC compound suitable for its end-use application, improve the processability of the PVC compound and enhance the performance of the PVC article.

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We are developing biobased polymeric modifiers for rigid, semi-rigid and flexible PVC compounds. We have shown that our polymeric modifiers can provide toughness, flexibility and permanence in addition to enhancing processing when added to PVC. For example, we have studies that show our PHA polymeric modifiers have the potential to improve PVC toughness beyond that achievable with leading polymeric modifiers and at the same time serve as a non-migrating, non-phthalate, high molecular weight biobased plasticizer.

We are working with customers to identify suitable PVC additives applications, which could lead to broader addressable market opportunities for our materials beyond those that focus on biodegradation. Target applications based on customer projects undertaken in 2014 and 2015 include different types of vinyl flooring, roofing membranes, wire and cable jacketing, structural profiles and PVC films.

We also are working with customers to develop applications that use our PHA performance additives to upgrade the physical properties, processability, and value of PVC recyclate in the production of construction materials containing recycled PVC in place of or in addition to virgin PVC.

Our PHA materials can provide significant benefits in PVC wood polymer composites and other highly filled systems used for structural profiles. We have shown that at low loading levels PHA can significantly increase the incorporation of wood flour or mineral fillers in the formulation resulting in a significant increase in the mechanical properties of the end-product. We are working with customers to develop commercial opportunities based on this unique attributes of our PHA biopolymers.

In addition to our efforts in PVC, we are developing PHA polymeric modifiers suitable for enhancing the performance of other polymers. Polylactic acid (PLA) is the leading biobased, compostable polyester on the market today and is used in application areas such as food and consumer product packaging, food service wares, films, thermoform sheets and non-woven textiles. We have conducted significant development work around toughening and enhancing the ductility of PLA with our PHA additives. We believe the ability to address these inherent weaknesses in PLA could significantly expand the application space for PLA, and we have shown that our Mirel amorphous PHA rubber modifiers can improve PLA performance while retaining the clarity, biocontent and compostability of the resulting material.

From our initial work in PVC and PLA modification, we believe Metabolix has the potential over time to develop a family of polymeric property modifiers that have unique or improved functionality compared to current fossil derived materials, that can be used in a range of material systems including PVC and PLA and that are both biobased and biodegradable.

Coatings for Paper and Cardboard

There is a significant need for innovative coatings for paper and cardboard. PHA coatings being developed by Metabolix are derived from renewable feedstocks and, like our other PHA products, can be compostable, marine biodegradable, and anaerobically digestible. We also have generated data showing that our development grade biobased PHA latex coatings possess excellent barrier and adhesive properties and are compatible with the re-pulping operations typically used to recycle paper and corrugated cardboard. We believe there is promising market potential for PHA coated paper and are continuing to develop this application technology and related commercial opportunities. If the developments in this area are successful, potential applications could range from repulpable/recyclable PHA coated paper and cardboard for consumer goods and food packaging to PHA coated paperstock for food service items.

Marine Biodegradable Micropowders

In 2015 we entered into a global, exclusive commercial and technology alliance with Honeywell International, Inc. ("Honeywell") to offer PHA biopolymers under its Honeywell Asensa® product line for use in cosmetics and personal care products. Earlier this year, Honeywell informed us that it is discontinuing its line of Asensa® personal care additives to refocus its efforts on core applications in the broader additives market. In light of this development, as well as a new U.S. federal law banning the use of plastic microbeads in cosmetics, we are re-evaluating this market. The Company plans to leverage the experience gained in the alliance with Honeywell as we evaluate opportunities for Mirel biopolymers in cosmetics and personal care products. With respect to marine biodegradable microbeads, we plan to take our lead from brand owners and formulators as they work through their strategies for reformulating products for U.S. and international markets in accordance with applicable regulations. We expect this will take some time to sort out in the marketplace, and in the meantime, Honeywell has transitioned to us unused commercial product, R&D results and customer contacts.

Functional Biodegradation

Our biopolymers are unique biobased materials for applications requiring functional biodegradation. Since PHAs are produced naturally in living organisms such as microbes, our PHA biopolymers can be biodegraded by similar microbes present in ambient environments such as soil and water. Our biopolymers can also be formulated or compounded with other biodegradable polymers to provide customers with customized product performance and controlled biodegradation tailored for specific applications and environments such as soil or water.

The soil biodegradability profile of PHA makes our products uniquely suited for resins used to produce biodegradable films and parts for horticultural and agricultural uses. Applications such as plant pots, vine clips, sod netting and agricultural film have a strong need for soil biodegradability like that offered by Mirel biopolymers. In these applications, the natural biodegradation process for our PHA biopolymers in the soil can provide a sustainable alternative to conventional plastics and save labor and other costs related to their disposal.

Like all other PHA materials, the marine biodegradability profile of Mirel biopolymers is unmatched in the industry as compared to other commercially available biodegradable materials such as PLA, PBAT or PBS. Mirel biopolymer resins biodegrade in the marine environment due to microbial activity, which makes them particularly suitable for the production of marine and aquatic biodegradable films and parts. Metabolix has worked on several projects with government agencies and universities to validate the use of Mirel biopolymers in shoreline applications.

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 substantial quantities in certain parts of the ocean, and marine birds and mammals have been found dead from ingesting or getting tangled in plastic debris. Mirel biopolymers allow brand owners the opportunity to offer a product that will biodegrade if inadvertently released into the environment or in applications where *in-situ* marine biodegradation is a key attribute such as erosion control and shoreline restoration.

Metabolix expects to continue working with customers on a variety of other applications where biodegradation of the polymer is a performance requirement. We have also worked with customers to develop pond water and aquarium water denitrification treatment systems based on the biodegradation and microbial activity of our biopolymers. In 2015, we signed a global, exclusive distribution agreement with Kolar Filtration to market and promote Metabolix PHA-based denitrification pellets for water treatment applications. This agreement streamlines the process for compounding and supplying finished product to established customers focused on ornamental and hobby aquaria, and we expect Kolar to expand the use of PHA-based denitrification into larger scale applications including fresh water ponds, hatcheries and commercial aqua farming.

The Value Proposition for Metabolix Biopolymers

Our strategy is based on the performance of our materials. With proprietary biopolymer formulations we aim to address unmet needs of our customers and leverage the distinctive properties of our PHAs to improve critical product qualities that enable our customers to enhance the value of their products and/or achieve cost savings through their value chain.

As such, we are positioning our Mirel biopolymers as specialty materials that offer a broad and attractive range of performance and processing properties compared to other bioplastics and performance additives. Our Mirel biopolymers can be used to deliver biobased content in an end use application, as an additive or modifier to improve performance of other polymers including conventional plastics (e.g. PVC) or other bioplastics (e.g., PLA) and/or to deliver the required biodegradation profile of an end use application.

We believe our Mirel biopolymers are differentiated and offer unique benefits in end use applications because of the following factors:

Biobased Content. Our Mirel PHA biopolymers products are produced using fermentation which converts industrial sugar (a biobased feedstock) into PHA biopolymer. Our biobased polymers can be used in neat form, or can be combined with other polymers to make plastic formulations and compounds with targeted amounts of biocontent. This can be a key factor in material selection by an end-use customer.

Biodegradability. Mirel biopolymers are available with a range of biodegradation profiles. For example, our PHA biopolymers will biodegrade due to microbial activity in a wide variety of conditions, including home and industrial compost systems, soil, anaerobic environments such as anaerobic digesters and septic systems, and marine and fresh water environments. The rate and extent of biodegradability will depend on the specific ingredients included in the particular Mirel

biopolymer formulation, the size and shape of the articles made from our Mirel biopolymers as well as the specific end-of-life environment. However, like all bioplastics and organic matter, Mirel biopolymers are not designed to biodegrade in conventional, non-active landfills. Many plastics marketed as “biodegradable” will only degrade under certain industrial composting conditions.

Performance Enhancement. Our PHA biopolymers possess unique chemistries that make them useful as additives or modifiers to improve the performance, properties and processing of other polymer materials including PVC, PVC recyclate, and PLA. While biocontent and biodegradability are not the drivers of enhanced performance, they are added benefits for those end use applications where improved performance is required and biobased content and/or biodegradability is desired.

Physical Properties. Mirel biopolymers possess a particularly broad range of physical properties, which makes them suitable for applications requiring hard/stiff polymers as well as those requiring soft/flexible polymers.

Processability. Our PHA biopolymers can be processed in many types of existing conventional polymer conversion processes typically used for petroleum-based plastic, which makes them suitable for applications requiring molded parts, films, thermoformed parts, coatings, fibers and non-wovens, among others.

Upper Service Temperature. Certain Mirel biopolymers will withstand temperatures in excess of 100^o C, i.e., the boiling point of water, an important threshold. Some formulations of Mirel biopolymers can withstand temperatures up to 130^o C.

Resistance to Hydrolysis. While Mirel biopolymers will biodegrade in marine and fresh water environments through natural processes mediated by microbes, they are resistant to chemical hydrolysis with cold or hot water over the intended life span of the product. This is an important feature distinguishing Mirel biopolymers from many other biodegradable polymers where the primary mechanism of degradation is hydrolysis followed by further microbial degradation of the residues.

Product Form. Our PHA biopolymers can be produced in pellet form (for further processing by customers), in densified form or as a blend with other biobased and/or biodegradable materials. We may also provide our biopolymers in other forms as may be determined by the needs of our customers and their end use applications.

Biobased and Biodegradability Certification

Mirel biopolymers in neat form have the advantage in the marketplace of being both biobased and biodegradable while having comparable functional properties to petroleum-based polymers. However, because there is sometimes confusion about the use of the terms “biobased” and “biodegradable” in the marketplace, we conform to the following industry guidelines when making these claims.

We certify our biopolymer resin products individually based on their specific composition and formulation. We sell certain Mirel biopolymers that have received the Vinçotte certifications of “OK Biodegradability Soil” for natural soil biodegradability, “OK Biodegradability Water” for fresh water biodegradability, “OK Compost” for compostability in an industrial composting unit, and “OK Compost Home” for compostability in home composting systems. Vinçotte is the recognized European authority on materials inspection, certification, assessments and technical training. In addition to the Vinçotte certifications, certain Mirel biopolymers have been certified compostable by the Biodegradable Products Institute (“BPI”), an independent North American certifier of compostable material. BPI certification shows that Mirel biopolymers comply with the specifications established in the American Society for Testing and Materials standard ASTM D6400 for composting in a professionally managed composting facility.

Regulatory Requirements

In connection with expanded pilot scale manufacturing of our new amorphous PHA material, Metabolix made submissions in 2015 to the U.S. Environmental Protection Agency (“EPA”) for a Premanufacturing Notice (PMN) in support of commercial sale of the product. As of October 2015, manufacturing of amorphous PHA product in the pilot facility was proceeding under a PMN granted by the EPA, and at the end of that month, we filed a Notice of Commencement which is required by the EPA within 30 days of first commercial manufacture.

Some applications for which Mirel biopolymers may be suitable, such as food packaging, and food service items, involve food contact, which, in the United States, is regulated by the U.S. Food and Drug Administration (“FDA”). The FDA process for food contact requires the submittal of a dossier, which is made up of a number of extraction studies conducted under specific guidelines.

Certain Mirel products have been cleared by the FDA for use in food contact applications. The conditions of use range from frozen food storage to hot filled or pasteurized to boiling water up to 100°C, including microwave reheating. These products are suitable for a wide range of food service and packaging applications including paper coatings, bags, cups, trays, squeeze bottles and injection molded parts like caps, closures and disposable items such as forks, spoons, knives, tubs, trays and hot cup lids. The clearance also includes products such as housewares, cosmetics and medical packaging.

Based on the potential for the use of our new amorphous PHA grades in applications requiring Food Contact Approval from the FDA, Metabolix has initiated contact with the agency to define the path forward for U.S. food contact application submission. Given the market opportunity and interest in food contact from customers in Europe, Metabolix also expects to make European regulatory submissions in 2016.

Sustainability Trends and Related Opportunities for Metabolix Biopolymers

The market for products with attributes of environmental responsibility or sustainability is an emerging business opportunity. We believe that numerous producers are positioning products as environmentally responsible or environmentally preferable to gain a commercial advantage as consumer preferences shift in this direction. In addition we have seen regulatory actions, such as bans, taxes, subsidies, mandates and initiatives, encouraging substitution of renewable and sustainable materials for petroleum-based incumbents. Regulatory actions or the anticipation of such actions, can provide additional motivation for producers to introduce sustainable materials in their products. While consumer preferences and the regulatory framework governing sustainable products is difficult to predict and largely beyond our control, we believe these trends present an interesting market opportunity for our biobased, biodegradable Mirel PHA biopolymers.

Plastic Industry Landscape

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 petroleum-based segment.

Established companies in this segment include BASF, Braskem, Dow Chemical, DuPont, Ineos, LyondellBasell, Mitsubishi Chemical, Lotte and SABIC among many others. Many of these companies produce petroleum based bulk plastics as well as specialty additives that are used to modify and/or enhance the performance of bulk plastics.

Specialty additives include a variety of polymeric additives, process aids and property modifiers that are used to modify critical properties or enhance processing of bulk commodity plastics. Examples include rubber modifiers used to toughen bulk plastics for certain applications, high molecular weight process aids that improve processing of other polymers as well as high molecular weight compatibilizers used in composite materials such as mineral filled plastics. The most relevant competitive materials to specialty PHA additives are specialty high molecular weight acrylic modifiers, specialty terpolymers and copolyesters that are used as property modifiers and process aids in other bulk polymers, including PVC and PLA. These materials are typically offered by specialty materials divisions within the established chemical and materials companies including Dow Chemical, DuPont, Arkema, DSM and Mitsubishi Chemical, among others.

The price of conventional bulk petroleum-based plastic is volatile, as it is dependent on petroleum as a key manufacturing input. The specialty polymeric additives are typically priced based on value-in-use and therefore less sensitive to petroleum inputs. Given their unique properties and composition, these materials do not compete directly on price with alternative offerings that may fulfill a similar but not identical function and typically have different chemical structure.

A few companies, such as DuPont, DSM, Arkema and Braskem, have taken steps toward production of plastics based on renewable resources and are commercializing conventional plastics that use building blocks derived from renewable resources as components. However, these products are generally not biodegradable. Other producers of petroleum-based plastics, including BASF and Lotte, now produce certain petrochemical based plastics that are biodegradable in industrial compost environments, but are otherwise persistent in the environment and are still subject to the volatility of oil and natural gas prices.

Within the biodegradable, biobased plastic segment, there are three distinct technologies: PHA, PLA and starch-based biodegradables. Just as a wide variety of different petroleum-based plastics now serve the needs of the market; we believe that these three product classes are more complementary than competitive. We believe Mirel PHA biopolymers offer a broad range of properties and processing options, and can address numerous opportunities for environmentally attractive alternatives to conventional petroleum-based plastics. We further believe Mirel PHA biopolymers offer unique properties that make them well suited as specialty additives for use as PVC property modifiers and process aids, PLA performance enhancers and in PHA based paper coatings. Unlike PLA and most starch-based composite biodegradables, Mirel biopolymers can:

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- biodegrade in natural soil and water environments, including the marine environment;
- biodegrade in either industrial or home composting environments;
- remain functional through a wide range of temperatures; and
- do not break down in everyday use.

Companies active in PHA plastics include Bio-on, EcoMann, Kaneka, Mango Materials, Meredian, Newlight Technologies, Tianan, and Tianjin Green Biomaterials. The key players in PLA and starch-based biodegradable plastics include Biome, Corbion, Mitsui Chemical, NatureWorks, Novamont and Teijin. Corbion, the leading producer of lactic acid, has announced its intention to forward integrate into PLA. Our PHA biopolymers can be blended with many of these materials to improve their performance and other characteristics. In addition, there are companies that compound blends of various materials, including bioplastics.

Status of Yield10 Bioscience

Metabolix has been conducting a research program in crop science for more than 14 years with the intent to harness the renewable nature of plants to produce renewable bioplastics, chemicals and bioenergy from crops. Historically, the focal point of our crop technology efforts has been around creating proprietary systems to produce PHB, the simplest member of the PHA family of biopolymers, in high concentration in the leaves of biomass crops or in the seeds of oilseed crops for these applications.

Our crop science program has been a technically challenging long term effort. As we succeeded in increasing the levels of PHB produced in plants, we saw that this increase in PHB production typically resulted in impaired plant growth. This result is not unexpected, as we were diverting a significant fraction of the carbon fixed by the plants into the PHB, which represents a new carbon sink. Given these observations and our longer-term goal to develop commercially viable PHB-producing switchgrass and the industrial oilseed Camelina, we began developing new genetic and informatics tools and capturing intellectual property around enhancing the photosynthetic capacity of plants. Early success in this area led us to expand our thinking, as fixing more carbon through enhanced photosynthesis is core to improved crop yield and global food security. In general plants can be divided into two groups based on the type of photosynthesis system they use. The simplest type of photosynthesis system is known as C3 photosynthesis and is found in most of the food crops we eat including rice, wheat, soybean, potato etc. and the second type is a more complex form known as C4 photosynthesis because these plants have evolved a unique cellular structure to further concentrate carbon dioxide through the C4 pathway for the RUBISCO enzyme. C4 photosynthesis plants include corn, sugarcane and oil palm and can have up to 5 times higher yield than C3 photosynthesis plants. This yield difference achieved through evolution is why plant scientists believe it is biologically possible to further increase photosynthesis in C3 crops. Using the computational methods and technology developed in our PHB-focused crop science program we have observed increased plant photosynthesis, leading to increases in biomass, seed yield, starch and oil content.

In 2015, we refocused our crop science program with a new mission and launched it under the name “Yield10 Bioscience.” We are working to spin out Yield10 into a separately funded venture focused entirely on further development and commercialization of these technologies and have begun speaking to potential investors and agriculture industry collaborators regarding the opportunity to participate in the venture.

Yield10 Bioscience is developing proprietary, breakthrough technologies to improve yield in major crops based on our “T3” transcriptome targeted metabolic engineering platform. We are focused on technologies that allow us to increase the efficiency of CO₂ fixation through photosynthesis and its conversion into plant matter. We have shown early, encouraging yield improvements in camelina seed and switchgrass biomass production, and we are working to advance the technology in agriculturally significant crops and provide innovative new solutions for enhanced global food security.

Yield10 is leveraging the microbial diversity found in nature to increase carbon fixation and eliminate bottlenecks in plant carbon metabolism, and has developed an engineering systems approach under the T3 platform targeted at step change improvements in crop yield. With this approach, Yield10 is working to deploy a series of proprietary gene systems to increase carbon capture and fixation in C3 plants. Early greenhouse and field trial data show a significant increase in seed yield in camelina, an industrial oil seed crop. Additional field trials are planned to confirm the initial results in camelina, and these gene systems are now being inserted into soybean, canola and rice for evaluation.

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Yield10 is also targeting yield improvement in crops utilizing the C4 photosynthetic system such as switchgrass, sugarcane, corn and sorghum. Yield10 has leveraged the transcriptome targeting module of its T3 platform to identify three novel global transcription factor (GTF) genes in the bioenergy crop switchgrass that result in increased photosynthesis, increased central metabolism and an overall increase in biomass yield. We have identified corresponding genes in both C3 and C4 food and feed crops, and are currently testing these genes in sugarcane and exploring partnerships to advance the technology in corn.

Although this research is at an early stage, we believe it may have applicability to a range of food, feed and biomass crops where there is a focus on improving crop yield. However, there can be no assurance that our efforts in this area will be successful or that we will be able to develop and implement suitable business arrangements for the spin out of this activity.

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.

As of December 31, 2015, we owned approximately 330 issued patents and approximately 89 pending patent applications worldwide, and we have licensed from third parties approximately five issued patents and patent applications worldwide. Our extensive patent portfolio covers, among other things, fundamental biotechnology used to produce Mirel biopolymers as well as a range of biobased chemicals, biopolymer compositions, processes and derived products. Our intellectual property portfolio includes patents directed to compositions of polymers, genes, vectors, expression systems in plants and microbes, polymer compositions of matter and formulations, devices, coatings and films, as well as methods of manufacture and use. Our patents are set to expire at various times between 2016 and 2032.

In 2015, we filed 23 patent applications worldwide including applications for four new inventions. The applications filed covered genetically modified microbial strains for making biobased chemicals and PHAs from methane or methanol substrates, PHA additives for improved recycling of polymers and PHA additives for producing highly filled polymer formulations.

We were also granted or allowed 23 patent applications in 2015, seven in the U.S. and sixteen internationally. The inventions covered under these patents include PHA latex technology, PHA crosslinking technology, production of C5 chemicals as well as poly-5-hydroxyvalerate PHA from microorganisms using renewable materials as feed substrates and toughened PLA/PHA blends for film applications. We continue to seek and evaluate new technologies and related intellectual property that might enhance our Company's business competitiveness.

Our registered U.S. trademarks include *Metabolix*, *Mirel*, the Metabolix four-leaf design, the Mirel heart-leaf design, and *Bio-Industrial Evolution*. These marks and certain other trademarks have also been registered in selected foreign countries.

Employees

As of December 31, 2015, we had 68 full-time employees. Of those employees, 49 were in research and development and 19 were in sales, marketing and administration. Among our research staff, 14 hold Ph.D.'s and 25 hold masters' or bachelors' degrees in their respective disciplines. Our technical 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. Most of our employees are located in Massachusetts. None of our employees are subject to a collective bargaining agreement. We consider our relationship with our employees to be good.

Corporate and Investor Information

Our company was incorporated in Massachusetts in June 1992 under the name Metabolix, Inc. In September 1998, we reincorporated in Delaware. Financial and other information about our company is available on our website (<http://www.metabolix.com>). The information on our website is not incorporated by reference into this annual report on Form 10-K and should not be considered to be part of this annual report on Form 10-K. We make available on our website, free of charge, copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the Securities and Exchange Commission (the "SEC").

Investors should note that we announce material information to our investors using our website, SEC filings, press releases, public conference calls and webcasts. We use these channels, as well as social media, to communicate with our shareholders and the public about our Company, our products and other matters. It is possible that the information we post on social media could be deemed to be material information. Therefore, we encourage investors, the media, and others interested in our Company to review the information we post on the social media channels listed at the top of our website.

In addition, the public may read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Also, our filings with the SEC may be accessed through the SEC's website at www.sec.gov.

ITEM 1A. RISK FACTORS

You should carefully consider the following information about risks, together with the other information contained in this report. If any of the circumstances or events described below actually arises or occurs, our business, results of operations, cash flows and financial condition could be harmed. In any such case, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks Relating to our Financial Position

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

The company held unrestricted cash and cash equivalents of approximately \$12.3 million at December 31, 2015. Our present capital resources are not sufficient to fund our planned operations for a twelve month period, and therefore, raise substantial doubt about our ability to continue as a going concern. Our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements as of and for the year ended December 31, 2015 with respect to this uncertainty.

We were successful during 2015 in raising \$14.7 million, net of offering costs, through a private placement of equity securities and on October 7, 2015, we entered into a common stock purchase agreement with Aspire Capital Fund, LLC, ("Aspire") under which Aspire is committed to purchase, at our direction, up to an aggregate of \$20.0 million of shares of our common stock over a 30 month period that began on November 9, 2015. Even if we sell shares under the Aspire agreement, we likely will require additional funding during the next twelve months, to continue our operations and support our capital needs. The timing, structure and vehicles for obtaining future financing are under consideration, but there can be no assurance that such financing efforts will be successful. The current economic environment and recent uncertainty and volatility in financial markets may make it difficult to obtain additional financing. Failure to receive additional funding in 2016 may force the Company to delay, scale back or otherwise modify its business and manufacturing plans, sales and marketing efforts, research and development activities and other operations, and/or seek strategic alternatives.

We continue to face significant challenges and uncertainties and, as a result, our available capital resources may be consumed more rapidly than currently expected due to (i) lower than expected sales of our biopolymer products as a result of slow market adoption; (ii) increases in capital costs and operating expenses related to the establishment and start-up of biopolymer manufacturing on our own or with third parties; (iii) changes we may make to the business that affect ongoing operating expenses; (iv) changes we may make to our business strategy; (v) changes in our research and development spending plans; (vi) higher than expected costs in connection with the relocation of our Massachusetts facilities, and (vii) other items affecting our forecasted level of expenditures and use of cash resources.

If we issue equity or debt securities to raise additional funds, (i) we may incur fees associated with such issuance, (ii) our existing stockholders may experience dilution from the issuance of new equity securities, (iii) we may incur ongoing interest expense and be required to grant a security interest in our assets in connection with any debt issuance, and (iv) the new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. In addition, utilization of our net operating loss and research and development credit carryforwards may be subject to significant annual limitations under Section 382 of the Internal Revenue Code of 1986 due to ownership changes resulting from future equity financing transactions. If we raise additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish valuable rights to our potential products or proprietary technologies, or grant licenses on terms that are not favorable to us.

The extent to which we utilize the facility with Aspire as a source of funding will depend on a number of factors, including the prevailing market price of our common stock, the volume of trading in our common stock and the extent to which we are able to secure funds from other sources. The purchase agreement contains limitations on the number of shares

that we may sell to Aspire. Additionally, we and Aspire may not effect any sales of shares of our common stock under the purchase agreement during the continuance of an event of default or on any trading day that the closing sale price of our common stock is less than \$0.50 per share. Even if we are able to access the full \$20.0 million under the purchase agreement, we may still need additional capital to fully implement our business, operating and development plans.

We have a history of net losses and our future profitability is uncertain.

With the exception of 2012, when the Company recognized \$38.9 million of deferred revenue from the terminated joint venture with Archer Daniels Midland, we have recorded losses since our inception, including our fiscal year ended December 31, 2015. At December 31, 2015, our accumulated deficit was approximately \$326 million. Our operating losses since inception and the insufficiency of our existing capital resources to fund our planned operations for a twelve month period raise substantial doubt about our ability to continue as a going concern. Our independent registered public accounting firm included an explanatory paragraph in its report on our financial statements as of and for the year ended December 31, 2015 with respect to this uncertainty. Since 1992, we have been engaged primarily in research and development and early-stage commercial activities. Because we have a limited history of 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 ability to generate revenues in the near-term is highly dependent on the successful commercialization of our biopolymer products, which is subject to many risks and uncertainties as described below. This is our first and only product family in the market. We expect that it will take time for our production to ramp up to an economical scale while the market for our products expands. As a result, we expect to have significant losses and negative cash flow for at least the next several years, as we incur additional costs and expenses for the continued development and expansion of our business, including the costs of establishing manufacturing capacity and ongoing expenses of research and product development. The amount we spend will impact our ability to become profitable and this will depend, in part, on the number of new products that we attempt to develop. 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.

Even if we can successfully manufacture and sell our products, whether we will be able to generate a profit on any of these products is highly uncertain and depends on a number of factors including the cost of production, the price we are able to charge for these products, and the emergence of competing products.

Risks Relating to our Biopolymers Business

Our biopolymer products may not achieve market success.

Implementation of our strategy for building a commercially successful specialty biopolymers business is at an early stage. We currently have limited customer commitments for commercial quantities of our biopolymer products. Some prospective customers are currently evaluating and testing our products prior to making larger-scale purchase decisions, but the time required for conversion of customers to commercial purchases is often long. The successful commercialization of our biopolymers is also dependent on our customers' ability to commercialize the end-products that they make with our biopolymers, which may never gain market acceptance.

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;
- our ability to produce products of consistent quality that offer functionality comparable or superior to existing or new polymer products;
- our ability to produce products fit for their intended purpose;
- our ability to obtain necessary regulatory approvals for our products;
- the speed at which potential customers qualify our biopolymers for use in their products;
- the pricing of our products compared to competitive products, including petroleum-based plastics;
- the strategic reaction of companies that market competitive products;
- our reliance on third parties who support or control production or distribution channels; and
- general market conditions.

We cannot assure you that we will be able to successfully produce biopolymers in a timely or economical manner, or at all.

We do not currently have a facility for commercial scale production of biopolymers. We have expanded our pilot scale production facility for biopolymers while we continue to evaluate various larger scale manufacturing options. However, our biopolymer manufacturing technology is highly complex. Construction of a new manufacturing facility or modification of an existing facility to make it suitable for our manufacturing process is likely to be time-consuming and expensive. We cannot assure you that we will have the necessary funds to finance the construction or modification of a commercial

manufacturing facility, or that we will be able to develop a manufacturing infrastructure in a timely or economical manner, or at all.

We may depend on obtaining commercial partners, production partners or government funding to finance and/or construct commercial manufacturing facilities for biopolymer production. In late 2015, we began accelerating our efforts to secure commercial production capacity of up to 10 KT or approximately 22 million pounds per year. Operating at the commercial level is a critical milestone in establishing a successful specialty biopolymers business. Our goal is to leverage existing industry assets and capabilities where possible and to secure this capacity in a capital-efficient manner with a manufacturing partner. There can be no assurance that we will be successful in establishing such a manufacturing partnership. Further, if we do succeed in establishing such a partnership, the terms of such an arrangement may require us to relinquish valuable rights or subject us to other terms that are not favorable to us.

Our future biopolymer production costs are uncertain and may ultimately be higher than we expect. Further, because of the lead-time required for construction of a manufacturing facility, we may have to make capital investments before we have proven the market demand for our products. If the commercial manufacturing capacity that we build or otherwise obtain is not appropriate to the level of market demand, manufacturing costs may not be economical. If we fail to develop adequate manufacturing capacity and expertise or fail to manufacture biopolymers economically at large scale or in commercial volumes, the commercialization of our biopolymers and our business, financial condition and results of operations will be materially adversely affected.

We may not be able to obtain raw materials in sufficient quantities or in a timely manner.

We expect that the production of our PHA biopolymer products will require large volumes of feedstock. We cannot predict the future availability of any particular feedstock or be sure that we will be able to purchase it in sufficient quantities, at acceptable prices, or in a timely manner. If these materials cannot be obtained in sufficient quantities or at acceptable prices, our ability to produce our products may be impaired, the cost of our products may increase, and our business will be adversely affected.

We may rely heavily on future collaborative partners.

We may enter into strategic partnerships to develop and commercialize our current and future products or research and development programs with other companies to accomplish one or more of the following:

- obtain capital, equipment and facilities,
- obtain funding for research and development programs, product development programs and commercialization activities,
- obtain expertise in relevant markets,
- obtain access to raw materials, and/or
- obtain sales and marketing services or support.

We may not be successful in establishing or maintaining suitable partnerships, and we may not be able to negotiate collaboration agreements having terms satisfactory to us or at all. Failure to make or maintain these arrangements or a delay or failure in a collaborative partner's performance under any such arrangements could have a material adverse effect on our business and financial condition.

We face and will face substantial competition.

We face and will face substantial competition from a variety of companies in the biodegradable, renewable resource-based plastic segment, as well as from companies in the conventional, non-biodegradable petroleum-based industry segment. Some of their products are suitable for use in a range of products at a price which may be lower than our premium priced product offerings. Many of these companies have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, sales and marketing, manufacturing, distribution, technical and other resources than us. Our 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.

Our products are made using genetically-engineered systems and may be, or may be perceived as being, harmful to human health or the environment.

Our PHA biopolymers have been produced by genetically engineered microbes using sugar derived from genetically engineered corn as a feedstock. Our future products may be produced from genetically engineered feedstocks through fermentation using genetically engineered microbes. Some countries have adopted regulations prohibiting or limiting the

production of genetically-engineered crops and the sale of products made using genetically engineered organisms or genetically engineered feedstocks. Such regulations could harm our business and impair our ability to produce biobased polymers 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 or products made from such organisms. Social concerns relating to genetically-engineered organisms could adversely affect acceptance of our products.

Our success will be influenced by the price of petroleum relative to the price of biobased feedstocks.

Our success may be influenced by the cost of our products relative to petroleum-based polymers. The cost of petroleum-based polymers is in part based on the price of petroleum. To date, our PHA biopolymers have been primarily manufactured using corn sugar, an agricultural feedstock. As the price of plant sugar feedstocks increases and/or the price of petroleum decreases, our biobased products may be less competitive relative to petroleum-based polymers. A material decrease in the cost of conventional petroleum-based polymers may require a reduction in the prices of our products for them to remain attractive in the marketplace and/or reduce the size of our addressable market.

We are subject to significant foreign and domestic government regulations which are subject to change, and compliance or failure to comply with these regulations could harm our business.

The manufacture, use, sale and marketing of PHA biopolymers is subject to government regulations in the U.S. and other countries, including requirements for government approval of food contact applications, hazardous materials regulations, regulations relating to marketing claims, and environmental, health and safety laws. Failure to comply with governmental regulations or to obtain government approval for our products could have a material adverse effect on our results of operations and financial condition. Further, our compliance with governmental regulations that are not enforced against our competitors could put us at a competitive disadvantage. One of the key markets for our biopolymer products is as biobased, compostable or biodegradable substitutes for non-biodegradable petroleum-based plastics. This market is driven in part by laws, regulations and policies designed to encourage or mandate the increased use of biobased and/or biodegradable alternatives to petroleum-based plastics. However, the regulatory framework governing biopolymers is complex, difficult to predict and largely beyond our control. The phasing out or elimination of these or similar laws and regulations, or the adoption of laws and regulations that are so broadly written as to ban our products along with the targeted non-biodegradable or petroleum-based plastic materials, could adversely affect our business.

We may not have adequate insurance and may have substantial exposure to payment of product liability claims.

The testing, manufacture, marketing, and sale of our products may involve product liability risks. Although we currently have insurance covering product liability claims up to \$5 million per occurrence and in the aggregate, we may not be able to maintain this insurance at an acceptable cost, if at all. In addition, this insurance may not provide adequate coverage against potential losses. If claims or losses exceed our liability insurance coverage, it could have a material adverse effect on our business and our financial condition.

Risks Relating to our Crop Science Program

We may not be successful in spinning out our crop science program.

In order to focus our efforts on our biopolymers business, we are planning to spin out our crop science program, which we call “Yield10 Bioscience,” into a separately funded venture focused on the development and commercialization of our crop science technologies. However, there can be no assurance that we will be successful in identifying third parties interested in funding or otherwise participating in Yield10 Bioscience on acceptable terms, if at all. The risks described below may impact our ability to spin out the crop science program. If we are not successful in spinning out the crop science program, we may incur substantial costs to either continue or wind down the program.

Our crop science product development cycle is lengthy and uncertain and will depend heavily on future collaborative partners.

The technology and processes used in our crop science program and the application of our technology to enhance photosynthetic efficiency of crops are at an early stage of development. Research and development in the seed, agricultural biotechnology, and larger agriculture industries is expensive and prolonged and entails considerable uncertainty. Completion of our development work will require a significant investment of both time and money, if it can be completed at all. To successfully develop and commercialize our innovations, we expect that Metabolix and/or Yield10 Bioscience will need to form collaborations with established agricultural industry companies. The industry is highly concentrated and dominated by a small number of large players, which could impact efforts to form such collaborations. Metabolix and/or Yield10 Bioscience may not be successful in establishing or maintaining suitable partnerships, and may not be able to negotiate

collaboration agreements having terms satisfactory to us or at all. In addition, industry collaborators have significant resources and development capabilities and may develop products and technologies that compete with or negatively impact the development and commercialization of our technologies.

Our crop science program may not be successful in developing commercial products.

We and our potential future collaborators may spend many years and dedicate significant financial and other resources developing traits that will never be commercialized. Seeds containing the traits that we develop may never become commercialized for any of the following reasons:

- our traits may not be successfully validated in the target crops;
- our traits may not have the desired effect sought by future collaborators for the relevant crops;
- development and validation of traits, particularly during field trials, may be adversely affected by environmental or other circumstances beyond our control;
- we or our future collaborators may be unable to obtain the requisite regulatory approvals for the seeds containing our traits;
- competitors may launch competing or more effective seed traits or seeds;
- a market may not exist for seeds containing our traits or such seeds may not be commercially successful;
- future collaborators may be unable to fully develop and commercialize products containing our seed traits or may decide, for whatever reason, not to commercialize such products; and
- we may be unable to patent our traits in the necessary jurisdictions.

Consumer and government resistance to genetically modified organisms may negatively affect the ability to commercialize crops containing our traits.

Food and feed made from genetically modified seeds are not accepted by many consumers and in certain countries production of certain genetically modified crops is effectively prohibited, including throughout the European Union, due to concerns over such products' effects on food safety and the environment. The high public profile of biotechnology in food and feed production and lack of consumer acceptance of products to which we have devoted substantial resources could have a negative impact on the commercial success of products that incorporate our traits and could materially and adversely affect our ability to obtain collaborations and to finance our crop science program. Metabolix and/or Yield10 Bioscience may incur liability and/or legal expenses if there are claims that our genetically-engineered crops damage the environment or contaminate other farm crops.

Risks Relating to Intellectual Property

Patent protection for our products is important and uncertain.

Our commercial success may depend in part on our obtaining and maintaining patent protection for our technologies in the United States and other jurisdictions, as well as successfully enforcing and defending this intellectual property against third-party challenges. If we are not able to obtain or defend patent protection for our technologies, then we will not be able to exclude competitors from developing or marketing such technologies, and this could negatively impact our ability to generate sufficient revenues or profits from product sales to justify the cost of development of our technologies and to achieve or maintain profitability. Our issued patents have expiration dates ranging from 2016 through 2032.

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. 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. 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 as the U.S. patents. There will be many countries in which we will choose not to file or maintain patents because of the costs involved. Competitors may also design around our patents or develop competing technologies.

Additionally, any issued patents owned by or licensed to us now or in the future may be challenged, invalidated, or circumvented. We could incur substantial costs to bring suits or other proceedings in which we may assert or defend our patent rights or challenge the patent rights of third parties. An unfavorable outcome of any such litigation could have a material adverse effect on our business and results of operations.

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 owned by third parties exist in areas relevant to our products and processes. We could incur substantial costs to challenge third party patents. If third parties assert claims against us or our customers alleging infringement of 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 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. Alternatively, we may seek licenses to such third party intellectual property. However, we may be unable to obtain these licenses on acceptable terms, if at all. 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.

We rely in part on trade secrets to protect our technology, and our failure to obtain or maintain trade secret protection could limit our ability to compete.

We rely on trade secrets to protect some of our technology and proprietary information, especially where we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. Litigating a claim that a third party had illegally obtained and was using our trade secrets would be expensive and time consuming, and the outcome would be unpredictable. Moreover, if our competitors independently develop similar knowledge, methods and know-how, it will be difficult for us to enforce our rights and our business could be harmed.

Risks Relating to Owning our Common Stock

Raising additional funds may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies.

If we raise additional funds through equity offerings or offerings of equity-linked securities, including warrants or convertible debt securities, we expect that our existing stockholders will experience significant dilution, and the terms of such securities may include liquidation or other preferences that adversely affect your rights as a stockholder. Debt financing, if available, may subject us to restrictive covenants that could limit our flexibility in conducting future business activities, including covenants limiting or restricting our ability to incur additional debt, dispose of assets or make capital expenditures. The Company may also incur ongoing interest expense and be required to grant a security interest in Company assets in connection with any debt issuance. If we raise additional funds through strategic partnerships or licensing agreements with third parties, we may have to relinquish valuable rights to our technologies or grant licenses on terms that are not favorable to us. In addition, the interests of our existing stockholders in our crop science program and related technologies may be significantly diluted in connection with our efforts to spin out Yield10 Bioscience.

Trading volume in our stock is low and an active trading market for our common stock may not be available on a consistent basis to provide stockholders with adequate liquidity. Our stock price may be extremely volatile, and our stockholders could lose a significant part of their investment.

Trading volume in our stock is low and an active trading market for shares of our common stock may not be sustained on a consistent basis. The public trading price for our common stock will be affected by a number of factors, including:

- reported progress in our biopolymers business or with respect to our efforts to spin out Yield10 Bioscience or develop crop related technologies, relative to investor expectations;
- changes in earnings estimates, investors' perceptions, recommendations by securities analysts or our failure to achieve analysts' earnings 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 issuances and/or sales of our common stock or preferred stock;
- announcements or the absence of announcements by us, or our competitors, regarding 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;

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- announcements related to patents issued to us or our competitors and to litigation involving our intellectual property;
- a lack of, or limited, or negative industry or security analyst coverage;
- developments in our industry and general economic conditions;
- short-selling or similar activities by third parties; and
- other factors described elsewhere in these “Risk Factors.”

As a result of these factors, our stockholders may not be able to resell their shares at, or above, their purchase 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. Any negative change in the public’s perception of the prospects of industrial or agricultural biotechnology or “clean technology” companies could depress our stock price regardless of our results of operations. These factors may have a material adverse effect on the market price of our common stock.

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 our stockholders might otherwise receive a premium for their shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management.

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% or more 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 our stockholders could receive a premium for their common stock in an acquisition.

Concentration of ownership among our existing officers, directors and principal stockholders may prevent other stockholders from influencing significant corporate decisions and depress our stock price.

Based on the number of shares outstanding as of December 31, 2015, our officers, directors and stockholders who hold at least 5% of our stock beneficially own a combined total of approximately 73.4% of our outstanding common stock, including shares of common stock subject to stock options and warrants that are currently exercisable or are exercisable within 60 days after December 31, 2015. If these officers, directors, and principal stockholders or a group of our principal stockholders act together, they will be able to exert a significant degree of influence over our management and affairs and control matters requiring stockholder approval, including the election of directors and approval of mergers, business combination or other significant transactions. The interests of one or more of these stockholders may not always coincide with our interests or the interests of other stockholders. For instance, officers, directors, and principal stockholders, acting together, could cause us to enter into transactions or agreements that we would not otherwise consider. Similarly, this concentration of ownership may have the effect of delaying or preventing a change in control of our company otherwise favored by our other stockholders. As of December 31, 2015, Jack W. Schuler and William P. Scully beneficially owned approximately 49.3% and approximately 11.6% of our common stock, respectively.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We do not own any real property. We currently lease approximately 28,000 square feet of office and research and development space at 21 Erie Street, Cambridge, Massachusetts. We have entered into an agreement with the landlord to terminate this lease effective July 31, 2016. On January 20, 2016, we entered into a lease agreement for approximately 30,000 square feet of office and research and development space at 19 Presidential Way, Woburn, Massachusetts. This lease has a term of 10 years and six (6) months beginning on June 1, 2016, subject to adjustment depending on the date that renovations of the premises are substantially completed. We also lease approximately 13,700 square feet of office and laboratory space at 650 Suffolk Street, Lowell, Massachusetts where the majority of our general and administrative employees are located. Our lease for this facility expires in May 2020, with an option to renew for one five-year period. We

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also have a one-time right to terminate this lease effective May 31, 2017. Our wholly-owned subsidiary, Metabolix Oilseeds, Inc. ("MOI"), located in Saskatoon, Saskatchewan, Canada, leases approximately 2,000 square feet of office, laboratory and greenhouse space. MOI's leases for these facilities expire on March 31, 2016 and July 31, 2016.

ITEM 3. LEGAL PROCEEDINGS

From time to time, the Company may be subject to legal proceedings and claims in the ordinary course of business. The Company is not currently aware of any such proceedings or claims that it believes will have, individually or in the aggregate, a material adverse effect on the business, financial condition or the results of operations.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock is traded on the NASDAQ Capital Market under the symbol "MBLX." The following table sets forth, for the periods indicated, the high and low sales prices for our common stock, as reported by NASDAQ, for our two most recent fiscal years:

	Common Stock Price			
	2015		2014	
	High	Low	High	Low
First Quarter	\$ 7.68	\$ 2.22	\$ 10.02	\$ 6.60
Second Quarter	5.10	2.93	7.92	4.50
Third Quarter	4.07	1.07	9.06	2.16
Fourth Quarter	3.98	1.25	5.58	1.50

The close price of our common stock, as reported by the NASDAQ Capital Market, was \$2.07 on March 22, 2016.

Stockholders

As of March 22, 2016, there were 27,369,390 shares of our common stock outstanding held by 43 stockholders of record.

Dividends

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.

Equity Compensation Plan Information

Please see Part III, Item 12, for information regarding securities authorized for issuance under our equity compensation plans.

Unregistered Sales of Securities

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On October 12, 2015, the Company issued 50,221 shares of common stock to participants in its Metabolix, Inc. 401(k) Plan as a matching contribution. The issuance of these securities is exempt from registration pursuant to Section 3(a)(2) of the Securities Act of 1933 as excluded securities.

On October 7, 2015, in consideration for entering into the common stock purchase agreement with Aspire Capital Fund, LLC, concurrently with the execution of the purchase agreement, the Company issued to Aspire 300,000 shares of the Company's common stock. The issuance of these securities was not registered under the Securities Act as such issuance was exempt from registration under Section 4(a)(2) of the Securities Act. On October 19, 2015, we filed a registration statement on Form S-1 to register these shares and up to 5,093,545 additional shares that we may sell to Aspire from time to time under the common stock purchase agreement. The registration statement was declared effective on October 30, 2015.

Issuer Purchases of Equity Securities

During the quarter ended December 31, 2015, there were no repurchases made by us or on our behalf, or by any "affiliated purchasers," of shares of our common stock.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated statement of operations data for the years ended December 31, 2015, 2014, and 2013 and balance sheet data as of December 31, 2015 and 2014 have been derived from our audited consolidated financial statements and related notes, which are included elsewhere in this report. The selected consolidated statement of operations data for the years ended December 31, 2012 and 2011 and the balance sheet data as of December 31, 2013, 2012 and 2011 have been derived from our audited financial statements that are not included in this report. 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 report. The historical results are not necessarily indicative of the results to be expected for any future period.

	Year ended December 31,				
	2015	2014	2013	2012	2011
(In thousands, except share and per share data)					
Statement of operations data:					
Total revenue	\$ 2,594	\$ 2,800	\$ 3,778	\$ 41,381 (1)	\$ 1,425
Costs and expenses:					
Cost of product revenue	660	1,482	1,908	1,030	—
Research and development expenses	16,572	17,342	18,802	23,177	24,445
Selling, general and administrative expenses	9,105	10,805	11,608	13,245	15,841
Total costs and expenses	26,337	29,629	32,318	37,452	40,286
Income (loss) from continuing operations	(23,743)	(26,829)	(28,540)	3,929	(38,861)
Other income, net	62	61	(4)	27	76
Net income (loss) from continuing operations	\$ (23,681)	\$ (26,768)	\$ (28,544)	\$ 3,956	\$ (38,785)
Loss from discontinued operations (2)	—	(1,878)	(1,962)	(326)	—
Loss from write down of assets held for sale	—	(888)	—	—	—
Total loss from discontinued operations	\$ —	\$ (2,766)	\$ (1,962)	\$ (326)	\$ —
Net income (loss)	\$ (23,681)	\$ (29,534)	\$ (30,506)	\$ 3,630	\$ (38,785)
Net income (loss) per share from continuing operations, basic and diluted (3)	\$ (0.95)	\$ (2.61)	\$ (4.97)	\$ 0.70	\$ (7.45)
Net income (loss) per share from discontinued operations, basic and diluted (3)	\$ —	\$ (0.27)	\$ (0.34)	\$ (0.06)	\$ —
Net income (loss) per share, basic and diluted (3)	\$ (0.95)	\$ (2.88)	\$ (5.31)	\$ 0.64	\$ (7.45)
Number of shares used in per share calculations, basic (3)	25,007,351	10,242,477	5,745,183	5,702,850	5,209,530
Number of shares used in per share calculations, diluted (3)	25,007,351	10,242,477	5,745,183	5,713,263	5,209,530

(1) In 2012, we recognized \$38.9 million of deferred revenue associated with the termination of our commercial alliance with Archer Daniels Midland Company.

(2) In 2014, we discontinued our German operations that had commenced in 2012. Our financial statements have been adjusted to reflect the discontinued operations for all comparable years since 2012. (See Note 16)

(3) In 2015, the Company effected a 1-for-6 reverse stock split of its common stock. All share amounts and per share data have been adjusted retroactively to reflect this reverse stock split.

	Year ended December 31,				
	2015	2014	2013	2012	2011
	(In thousands)				
Balance Sheet Information:					
Cash, cash equivalents and short-term investments	\$ 12,269	\$ 20,046	\$ 19,209	\$ 43,773	\$ 76,855
Total assets	17,088	23,135	26,738	53,510	82,912
Long-term deferred revenue	—	—	—	—	35,944
Other long-term obligations	150	150	145	186	340
Total liabilities	4,060	4,339	6,340	6,170	43,449
Accumulated deficit	(325,753)	(302,072)	(272,538)	(242,032)	(245,662)
Total stockholders' equity	13,028	18,796	20,398	47,340	39,463

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with the Consolidated Financial Statements and Notes thereto included in this Annual Report on Form 10-K.

All dollar amounts are stated in thousands.

Overview

Metabolix is an advanced biomaterials company focused on delivering sustainable solutions to the plastics industry. 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 our biotechnology research with real world chemical engineering and industrial practice. In addition, we have created an extensive intellectual property portfolio to protect our innovations which, together with our technology, serves as a valuable foundation for our business.

Metabolix was formed to leverage the ability of natural systems to produce complex biopolymers from renewable resources. We have focused on a family of biopolymers found in nature called polyhydroxyalkanoates (“PHAs”), which occur naturally in living organisms and are chemically similar to polyesters. We have demonstrated the production of our PHAs from pilot to industrial scale and we have sold our PHA products commercially since 2012.

Our targeted markets offer substantial opportunity for innovation and value creation. Our strategy is based on the performance and differentiation of our materials. We aim to address unmet needs of our customers and leverage the distinctive properties of our proprietary PHA biopolymers to improve critical product qualities of material systems and enable our customers to enhance the value of their products and/or achieve cost savings through their value chains. As such, we are positioning our biopolymers as advanced specialty materials that offer a broad and attractive range of product and processing properties compared to other bioplastics or performance additives. We believe that a substantial global market opportunity exists to develop and commercialize our advanced biopolymer product technology.

In 2014, we conducted a comprehensive strategic review of our business and decided to focus the Company’s resources on commercializing PHA performance biopolymers. In connection with this more focused business strategy, in 2014 we discontinued our operations in Germany and sold substantially all of the assets of our wholly-owned German subsidiary, Metabolix GmbH. We suspended work in a program that was developing processes for producing biobased chemicals from PHAs and we are planning to spin out our crop science program—a research program focused on crop yield improvement and the production of PHAs in crops using agricultural biotechnology.

In making this pivot, we took measures to reshape the Company and created a new model for our approach to commercial development of our biopolymers as specialty materials rather than bulk plastics. We are now targeting our research, development and commercial resources on the use of our Mirel® PHA biopolymers as performance additives in a range of applications where they can improve performance and/or reduce cost in other material systems such as polyvinyl chloride (“PVC”) and polylactic acid (“PLA”). In PVC additives, we are focusing on opportunities where our PHA biopolymers are used as property modifiers or process aids. We are also targeting applications where the performance, biodegradability, biocontent and other attributes of our PHA biopolymers provide unique functional advantages, such as

biodegradation, required by such applications, including PHA resins for molded articles and films, as well as PHA latex and other PHA coatings for paper and cardboard.

In early 2015, we significantly increased the nameplate capacity at our contracted pilot manufacturing facilities to 600,000 pounds per year of our Mirel PHA biopolymers. In connection with this plan, we entered into multi-year agreements with the operator of our pilot recovery facility and with a toll contractor for fermentation services. The initial focus of this manufacturing plan is production of the Company's a-PHA (amorphous, low Tg rubber) biopolymer for use in ongoing development and commercialization activities based on this unique PHA product. We intend to use this new PHA material, together with existing inventory, to support both market development and initial customer conversions as we continue working to build our PHA performance biopolymers business. The capital expansion at our pilot recovery facility was completed in 2015. We anticipate operating our pilot plant at nameplate capacity during 2016. We expect to sell the bulk of this a-PHA material to customers for commercial applications mainly as performance additives for PVC and PLA. We also plan to maintain a stream of a-PHA supply for continued market development with a view to building the base for commercial scale biopolymer operations as we continue evaluating and developing production expansion options.

Based on our commercial progress in 2015, we are accelerating our efforts to secure our first commercial production line focusing on annual capacity of up to 10 kilo tonnes (KT) or approximately 22 million pounds. Operating at commercial scale would represent a key milestone in establishing a successful specialty biopolymers business. This capacity would also serve as a stepping stone to the establishment of an additional commercial scale production, likely in units of 20 KT, or approximately 44 million pounds. In 2016, we expect to be actively engaged in developing manufacturing options for our first tranche of commercial scale capacity. Our goal is to leverage existing industry assets and capabilities where possible and to secure this capacity in a capital-efficient manner with a manufacturing partner.

We are focused on building our customer base to support the successful commercial development of our business. To that end, we have intensified our efforts in product and application development and are continuing to enhance our capabilities in this area. We are also working closely with customers across a range of applications to understand the processing and performance profiles for their products, and are pursuing commercial opportunities with customers at various levels of maturity from initial data demonstration and product and process validation, through to larger scale trials, product testing, product qualification and product launch.

This approach is integral to our specialty materials strategy, where the market opportunities are driven by the important value-adding role our biopolymers can play as components of other material systems or by bringing unique functional advantages such as biodegradability to customer applications. This is a critical area of focus for us and our success depends on working effectively with customers to identify uses and applications for our PHA biopolymers that substantiate the commercial potential for our products.

In 2015 we continued to work on customer projects across our target applications spaces--PVC processing aids and property modifiers, PLA modification, functional biodegradation and coatings for paper. During the year, we reported initial customer conversions for several smaller customers and we made progress advancing complex development programs for several larger opportunities. We also secured a significant commercial conversion with Kolar Filtration in the area of functional biodegradation. Specifically, we signed a global, exclusive distribution agreement with Kolar for PHA-based denitrification pellets used in ornamental and hobby aquaria, ornamental ponds, fish hatcheries, and commercial aqua farming. In the area of PVC modification, we secured our first commercial order from a new customer for a-PHA used in a PVC flooring application--protective vinyl floor tiles sold in major home improvements stores. In 2016, we will continue to work closely with customers across our target application spaces to successfully complete development programs and to convert them to repeat, commercial sales.

Our crop science program has been a technically challenging long-term effort, initially directed toward the production of PHA in plant crops. Based on our observations in this research, we began refocusing our crop science program around new genetic and informatics tools and intellectual property for enhancing the photosynthetic capacity of plants. In 2015, we launched our refocused crop science program under the name "Yield10 Bioscience." We are seeking to spin out Yield10 into a separately funded venture focused entirely on the further development and commercialization of these technologies, and we have begun talking to potential investors and industry collaborators regarding the opportunity to participate in the venture. We have also named a scientific advisory board to provide technical advice and industry experience to Yield10.

We have incurred significant losses since our inception, including each of the three years ended December 31, 2015. As of December 31, 2015, our accumulated deficit from inception to date was \$325,753 and total stockholders' equity was \$13,028.

Collaborative Arrangements

We are not currently participating in any collaborative arrangements. Our historical strategy for collaborative arrangements has been 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, our collaborative agreements have been complex, containing multiple elements covering a variety of present and future activities.

Government Grants

As of December 31, 2015, proceeds of \$2,079 remain available under our U.S. government grants. This includes amounts for reimbursement to our subcontractors, as well as reimbursement for our employees' time, benefits and other expenses related to future performance.

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

Program Title	Funding Agency	Total Government Funds	Total received through December 31, 2015	Remaining amount available as of December 31, 2015	Contract/Grant Expiration
Production of High Oil, Transgene Free Camelina Sativa Plants through Genome Editing	Department of Energy	\$ 1,997	\$ —	\$ 1,997	September 2017
Renewable Enhanced Feedstocks For Advanced Biofuels And Bioproducts ("REFABB")	Department of Energy	6,000	5,933	67	February 2016
Subcontract from University of California (Los Angeles) project funded by ARPA-E entitled "Plants Engineered to Replace Oil: Energy Plant Design"	Department of Energy	819	819	—	September 2015
Capacity Building for Commercial-Scale PHB Camelina Development	National Research Council Canada	269	269	—	September 2014
Subcontract from University of Massachusetts (Amherst) project funded by ARPA-E entitled "Development of a Dedicated High Value Biofuels Crop"	Department of Energy	663	648	15	December 2015
Development of a Sustainable Value Added Fish Feed Using PHB Producing Camelina	National Research Council Canada	96	83	—	January 2015
Total		\$ 9,844	\$ 7,752	\$ 2,079	

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 our significant accounting policies, which are described in Note 2 to our consolidated financial statements, involve a degree of judgment and complexity. Accordingly, we believe that the specific accounting policies described below are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of operations.

Revenue Recognition

We recognize revenue in accordance with accounting standards on revenue recognition. Principal sources of revenue are government research grants, product sales, license fees, royalty revenues and research and development payments that are primarily derived from collaborative agreements with other companies.

Our policy is to recognize product revenue when evidence of an arrangement exists, title has passed or services have been rendered, the selling price is fixed or determinable and payment by the customer is reasonably assured. Revenue from product sales to customers is recognized when all elements of the sale have been delivered. Our product return policy provides for discretion in accepting customer product returns during a period of sixty days after product delivery. Until sufficient experience is developed on which to base an estimate of product returns, we defer recognition of product revenue and related costs until the later of (i) the end of the sixty day period or (ii) when the customer payment has been received.

We recognize government grants as revenue because the grants are central to the Company's ongoing crop science program. Revenue is earned as research expenses related to the grants are incurred. Funds received from government grants in advance of work being performed are recorded as deferred revenue until earned.

Fees to license the use of our proprietary and licensed technologies are recognized only after both the license period has commenced and the licensed technology, if any, has been delivered to the licensee. Royalty revenue is recognized when it becomes determinable and collection is reasonably assured. Otherwise we recognize royalty revenue upon receipt of payment.

Inventory

We state inventory at the lower of cost or market and value inventory using the average cost method. We analyze our inventory levels quarterly and write down, as a cost of product revenue, inventory we consider to be in excess of expected sales requirements, that fails to meet commercial sales specifications or that has become obsolete.

Stock-Based Compensation

The accounting standard for stock-based compensation requires that all stock-based awards to employees be recognized as an expense in the consolidated financial statements and that such expense be measured at the fair value of the award.

Determining the appropriate fair value model and calculating the fair value of stock-based payment awards requires the use of highly subjective assumptions, including the expected life of the stock-based payment awards and stock price volatility. We use the Black-Scholes option-pricing model to value our service-based option grants and determine the related compensation expense. During 2014, we issued restricted stock units containing market and performance vesting conditions to our Chief Executive Officer. We estimated the fair value and derived service period of these awards using a Monte Carlo valuation model. The assumptions used in calculating the fair value of stock-based awards represent management's best estimates, but the estimates involve inherent uncertainties and the application of management judgment. See Note 12 to the consolidated financial statements for further discussion on the key assumptions used to determine the fair values of option grants pursuant to the Black-Scholes option pricing model.

Results of Operations

The consolidated financial statements for the two years ending December 31, 2015, have been presented to reflect the operations of Metabolix GmbH, as well as certain European operations conducted by Metabolix, Inc. prior to the formation of Metabolix GmbH, as a discontinued operation.

Comparison of the Years Ended December 31, 2015 and 2014**Revenue**

	Year ended December 31,		Change
	2015	2014	
Product revenue	\$ 619	\$ 546	\$ 73
Grant revenue	1,350	1,807	(457)
License fee and royalty revenue	625	447	178
Total revenue	<u>\$ 2,594</u>	<u>\$ 2,800</u>	<u>\$ (206)</u>

Total revenue from continuing operations was \$2,594 and \$2,800 for the twelve months ended December 31, 2015 and 2014, respectively. During the twelve months ended December 31, 2015 and 2014, we recognized \$619 and \$546, respectively of revenue from sales of biopolymer products. The increase of \$73, or 13%, for the twelve months ended December 31, 2015 is the result of product adoption by initial customers who have successfully completed product trials and are beginning to place repeat orders. Product revenue recognized during the year ended December 31, 2015 and 2014 includes \$57 and \$91, respectively, of previously deferred revenue from shipments to customers made during the prior years. At December 31, 2015 and December 31, 2014, short-term deferred revenue on our balance sheet included \$236 and \$57 of deferred product revenue, respectively. Grant revenue for the twelve months ended December 31, 2015 and 2014 was \$1,350 and \$1,807, respectively, and was primarily from revenue earned from the REFABB grant. The \$457 decrease is primarily due to the completion of the subcontract award with University of California and decreased activity related to the REFABB grant. During the twelve months ended December 31, 2015 and 2014, we recognized \$625 and \$447, respectively, of license and royalty revenue related to licensing of our technology. The \$178 increase is primarily related to increased revenues from Tephra, a related party that licenses our technology for use in certain medical applications.

We anticipate that product revenue will increase over the next twelve months as we increase production of our PHA biopolymers and gain market acceptance for our products. However, we expect to continue to see variations in quarterly sales as we work with customers to build our specialty biopolymers business.

Costs and Expenses

	Year ended December 31,		Change
	2015	2014	
Cost of product revenue	\$ 660	\$ 1,482	\$ (822)
Research and development expenses	16,572	17,342	(770)
Selling, general, and administrative expenses	9,105	10,805	(1,700)
Total costs and expense	<u>\$ 26,337</u>	<u>\$ 29,629</u>	<u>\$ (3,292)</u>

Cost of Product Revenue

Cost of product revenue from continuing operations was \$660 and \$1,482 for the twelve months ended December 31, 2015 and 2014, respectively. These costs primarily include the cost of inventory associated with product revenue recognized during the respective years and inventory impairment charges recorded during each of the periods. The decrease of \$822 year-over-year is primarily attributable to a decrease in inventory impairment charges. The Company recognized an inventory impairment charge of \$209 during the twelve months ended December 31, 2015 as compared to \$873 for the twelve months ended December 31, 2014. Cost of product revenue for each period also includes the cost of sample inventory shipped to prospective customers, warehousing and certain freight charges. The Company also recorded a charge of \$888 during the year ended December 31, 2014, within discontinued operations, for the write-down of inventory to its estimated fair market value.

Although there may be fluctuations from period to period, we expect our overall cost of product revenue from continuing operations will increase substantially over the next twelve months, as a result of the anticipated transition of cost of biopolymer pilot production from research and development expense to cost of product revenue.

Research and Development Expenses

Research and development expenses from continuing operations were \$16,572 and \$17,342 for the twelve months ended December 31, 2015 and 2014, respectively. The decrease of \$770 was primarily due to a decrease in employee compensation and related benefit expenses. Employee compensation and related benefit expenses were \$8,589 and \$9,562 for the twelve months ended December 31, 2015 and 2014, respectively. The decrease of \$973 is primarily attributable to decreases in headcount and employee stock compensation expense related to the October 2014 restructuring of our U.S. organization. Depreciation expense was \$241 and \$456 for the twelve months ended December 31, 2015 and 2014, respectively. The decrease of \$215 was due to existing equipment reaching full depreciation. The decreases in employee compensation and depreciation were partially offset by an increase in pilot manufacturing expense of \$534. Pilot manufacturing expenses were \$3,392 and \$2,858 for the twelve months ended December 31, 2015 and 2014, respectively, with the increase resulting from our expanded pilot production of biopolymers used for customer trials and new product development.

We expect research and development expenses to decrease during 2016 as a result of the anticipated transition of cost of pilot biopolymer production from research and development expense to commercial cost of product revenue.

Selling, General, and Administrative Expenses

Selling, general, and administrative expenses from continuing operations were \$9,105 and \$10,805 for the fiscal years ended December 31, 2015 and 2014, respectively. The decrease of \$1,700 over fiscal 2014 was primarily attributable to decreases in employee compensation and related benefits expenses. Employee compensation and related benefits expenses decreased by \$1,442 from \$6,121 for the twelve months ended December 31, 2014 to \$4,679 for the twelve months ended December 31, 2015. The decrease was primarily attributable to decreases in employee headcount and stock compensation expense as a result of restructuring of our U.S. organization. In addition, the Company has experienced overall reductions in expenses across many categories, including travel, consulting, accounting and investor relations, as a result of the reduced headcount and cost containment measures enacted by management. The expense reductions were partially offset by a one-time technology license payment of \$300 made during 2015.

We expect our selling, general and administrative expenses for the next twelve months to increase modestly compared to current levels.

Other Income (Net)

	Year ended December 31,		Change
	2015	2014	
Interest income, net	\$ 5	\$ 7	\$ (2)
Other income (expense), net	57	54	3
Total other income (expense), net	\$ 62	\$ 61	\$ 1

Other income, net, was \$62 and \$61 for the years ended December 31, 2015 and 2014, respectively. Other income, net, during both years consisted primarily of income from our short-term investments in money market funds, net of custodial fees, and realized foreign currency gains and losses.

Comparison of the Years Ended December 31, 2014 and 2013**Revenue**

	Year ended December 31,		Change
	2014	2013	
Product revenue	\$ 546	\$ 461	\$ 85
Grant revenue	1,807	2,480	(673)
Research and development revenue	—	618	(618)
License fee and royalty revenue	447	219	228
Total revenue	\$ 2,800	\$ 3,778	\$ (978)

Total revenue from continuing operations was \$2,800 and \$3,778 for the fiscal years ended December 31, 2014 and 2013, respectively. During the twelve months ended December 31, 2014, we recognized \$546 of product revenue compared to \$461 in 2013 from sales of biopolymers. The increase of \$85 for the twelve months ended December 31, 2014 was primarily related to increased sales of compounded product. At December 31, 2014 and December 31, 2013, short-term deferred revenue on the Company's balance sheet included \$57 and \$537 of deferred product revenue, respectively. During the fiscal year ended December 31, 2014, we recognized \$1,807 of grant revenue compared to \$2,480 in 2013. The decrease of \$673 in grant revenue for the twelve months ended December 31, 2014 consisted primarily of a net decrease in revenue recognized from the REFABB grant of \$400 in comparison to the prior year and resulted from a reduction in labor and other direct charges incurred in connection with the grant. Completion of the initial phase of the UCLA ARPA-E grant resulted in a net decrease in revenue recognized of \$208 in comparison to the year ended December 31, 2013. During 2013 we recognized \$618 in research and development revenue earned from a funded research and development arrangement with a third party that completed during that year. During the twelve months ended December 31, 2014, we recognized \$447 of license fee and royalty revenue, including license and royalty revenue from related parties, compared to \$219 for the twelve months ended December 31, 2013. The increase of \$228 in license fee and royalty revenue was primarily related to revenue from Tephra, Inc., a related party.

Costs and Expenses

	Year ended December 31,		Change
	2014	2013	
Cost of product revenue	\$ 1,482	\$ 1,908	\$ (426)
Research and development expenses	17,342	18,802	(1,460)
Selling, general, and administrative expenses	10,805	11,608	(803)
Total costs and expense	\$ 29,629	\$ 32,318	\$ (2,689)

Cost of Product Revenue

Cost of product revenue was \$1,482 and \$1,908 for the fiscal years ended December 31, 2014 and 2013, respectively. These costs primarily include the cost of inventory associated with product revenue recognized during the respective years and inventory impairment charges. The decrease of \$426 year-over-year is primarily attributable to lower inventory logistics costs partially offset by an increase in inventory impairment expense. We routinely evaluate our inventory in order to determine whether its current book value is below the cash value we expect to realize from its sale. During our fiscal years ended December 31, 2014 and 2013, we recorded impairment charges of \$873 and \$746, respectively, for slow moving or obsolete inventory that we determined was unlikely to be sold. Cost of product revenue for each year shown also includes the cost of sample inventory shipped to prospective customers, warehousing, product packaging and certain freight charges. The Company also recorded charges of \$888 and \$72 during the years ended December 31, 2014 and 2013, respectively, within discontinued operations for the write-down of inventory to its estimated fair market value.

Research and Development Expenses

Research and development expenses from continuing operations were \$17,342 and \$18,802 for the twelve months ended December 31, 2014 and 2013, respectively. The decrease of \$1,460 over fiscal 2013 was primarily attributable to decreases in employee compensation and related benefit expenses, sponsored research activities, lower expenses for research supplies, and reduced depreciation expense. Pilot material production expenses offset a portion of these expense reductions by increasing to \$2,858 during 2014, from \$2,159 for the twelve months ended December 31, 2013, due to higher purchases of biopolymer pilot material in 2014 compared to 2013. Employee compensation and related benefit expenses were \$9,562 and \$10,803 for the twelve months ended December 31, 2014 and 2013, respectively. The decrease of \$1,241 was primarily attributable to decreases in employee headcount and stock compensation expense, offset by approximately \$106 of one-time severance costs associated with our October 2014 work force reduction. In addition, sponsored research costs decreased to \$297 from \$690 for the twelve months ended December 31, 2014 and 2013, respectively. The reduction of \$393 was primarily due to reduced outside testing of material produced and a reduction in subcontractor work related to the REFABB grant. Expenses for research supplies decreased by \$209 from \$762 for the year ended December 31, 2013, to \$553 for the year ended December 31, 2014, and was primarily related to decreased activity resulting from our lower headcount and suspension of our biobased chemicals program. Depreciation expense was \$456 and \$831 for the twelve months ended December 31, 2014 and 2013, respectively. The decrease of \$375 was due to a combination of existing equipment reaching full depreciation and relatively low acquisitions of depreciable fixed assets during 2014.

Selling, General, and Administrative Expenses

Selling, general, and administrative expenses from continuing operations were \$10,805 and \$11,608 for the fiscal years ended December 31, 2014 and 2013, respectively. The decrease of \$803 over fiscal 2013 was primarily attributable to decreases in employee compensation and declines in consulting expenses and professional fees. Employee compensation and related benefits expenses were \$6,121 and \$6,369 for the twelve months ended December 31, 2014 and 2013, respectively. The decrease of \$248 was primarily attributable to decreases in headcount, recruiting and year-end bonus expense. These reductions in employee compensation expenses were offset by approximately \$518 of one-time severance costs associated with our restructuring undertaken during the fourth quarter of 2014 of which \$80 was paid during 2014 and \$438 was paid during the year ended December 31, 2015. Consulting expenses decreased to \$351 from \$627 for the fiscal years ended December 31, 2014 and 2013, respectively. The decrease of \$276 was primarily attributable to a general reduction in use of outside consultants during 2014. Professional fees decreased to \$2,158 from \$2,258 for the fiscal years ended December 31, 2014 and 2013, respectively. The decrease of \$100 was primarily due to a reduction in accounting and audit service fees.

Other Income (Net)

	Year ended December 31,		Change
	2014	2013	
Interest income, net	\$ 7	\$ 51	\$ (44)
Other income (expense), net	54	(55)	109
Total other income (expense), net	<u>\$ 61</u>	<u>\$ (4)</u>	<u>\$ 65</u>

Other income (expense) net, were a net income of \$61 and net expense of \$4 for the years ended December 31, 2014 and 2013, respectively. Other income (expense), net, during both years consisted primarily of income from our short-term investments, net of investment management and custodial fees, and realized foreign currency gains and losses resulting from foreign currency transactions. The other income during 2014 included a gain from the sale of property and equipment realized from our sale of used laboratory equipment.

Discontinued Operations

In connection with a strategic shift in our business, we decided to discontinue operations in Germany and in October 2014, we sold substantially all of the assets of our wholly-owned German subsidiary, Metabolix GmbH, to a German manufacturer of engineering plastic compounds. The buyer acquired our Mvera™ B5010 and B5011 products for compostable film, as well as certain inventory, certain contracts, and the Mvera™ trademark. The buyer also took over the Metabolix GmbH employees and office space. The purpose of this sale was to simplify our business structure and focus resources on the success of our core biopolymers business based on PHA performance additives.

During its fiscal year ending December 31, 2014, the Company incurred a loss from discontinued operations of \$2,766. Included in this amount was a loss of \$888 to write down assets held for sale to their fair market value, which was the contractual purchase price for the assets. The comparable loss from our discontinued German operation for the fiscal year ended December 31, 2013, was \$1,962.

Liquidity and Capital Resources

Currently, we require cash to fund our working capital needs, to purchase capital assets and to pay our operating lease obligations.

The primary sources of our liquidity have been:

- equity financing;
- our former strategic alliance with ADM;
- government grants;
- other funded research and development arrangements;
- licensing revenues;
- product revenues; and
- interest earned on cash and short-term investments.

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We have incurred significant expenses relating to our research and development efforts. As a result, we have incurred net losses since our inception. As of December 31, 2015, we had an accumulated deficit of \$325,753. Our total unrestricted cash and cash equivalents as of December 31, 2015, were \$12,269 as compared to \$20,046 at December 31, 2014. As of December 31, 2015, we had no outstanding debt.

Our cash and cash equivalents at December 31, 2015 were held for working capital purposes. As of December 31, 2015, we had restricted cash of \$619. Restricted cash consists of \$494 held in connection with the lease agreement for our Cambridge, Massachusetts facility and \$125 held in connection with our corporate credit card program. On January 20, 2016, we entered into a new facility lease for approximately 30,000 square feet of office and research and development space at 19 Presidential Way, Woburn, Massachusetts. The terms of this lease required us to increase our restricted cash by setting aside an additional \$307 of cash as a security deposit through an irrevocable letter of credit. Concurrent with the new lease, we signed a lease termination agreement with the landlord of the Cambridge facility. We expect that the \$494 in restricted cash held in connection with that lease will be released during the third quarter of 2016.

Investments are made in accordance with our corporate investment policy, as approved by our Board of Directors. The primary objective of this policy is to preserve principal and investments are limited to high quality corporate debt, U.S. Treasury bills and notes, money market funds, bank debt obligations, municipal debt obligations and asset-backed securities. The policy establishes maturity limits, concentration limits, and liquidity requirements. As of December 31, 2015, we were in compliance with this policy.

With the exception of 2012, when the Company recognized \$38,885 of deferred revenue from the terminated Telles joint venture, it has recorded losses since its inception, including its fiscal year ended December 31, 2015. As of December 31, 2015, the Company held unrestricted cash and cash equivalents of \$12,269. We continue to face significant challenges and uncertainties and, as a result, our available capital resources may be consumed more rapidly than currently expected due to (a) lower than expected sales of our biopolymer products as a result of slow market adoption; (b) increases in capital costs and operating expenses related to the expansion of pilot manufacturing or the establishment and start-up of commercial manufacturing either on our own or with third parties; (c) changes we may make to the business that affect ongoing operating expenses; (d) changes we may make to our business strategy; (e) changes in our research and development spending plans; (f) higher than expected costs in connection with the relocation of our Massachusetts facilities, and (g) other items affecting our forecasted level of expenditures and use of cash resources. Our present capital resources are not sufficient to fund our planned operations for a twelve month period, and therefore, raise substantial doubt about our ability to continue as a going concern. We anticipate approximately \$25,000 of net cash usage for the year ended December 31, 2016. This includes approximately \$800 of non recurring costs associated with the relocation of our Cambridge operations to our facility in Woburn.

We were successful during 2015 in raising \$14,703, net of offering costs, through a private placement of equity securities. On October 7, 2015, we entered into a common stock purchase agreement with Aspire under which Aspire is committed to purchase, at our direction, up to an aggregate of \$20,000 of shares of our common stock over a 30 month period that began on November 9, 2015, the date on which the conditions to the commencement of common stock purchases under the agreement were satisfied. Common stock may be sold from time to time at the Company's option under pricing formulas based on prevailing market prices around the time of each sale. At December 31, 2015, the full \$20,000 remained available under the purchase agreement with Aspire. Even if we sell shares under the Aspire agreement, we will require additional funding during the next twelve months to continue our operations and support our capital needs. The timing, structure and vehicles for obtaining future financing are under consideration, but there can be no assurance that such financing efforts will be successful. The current economic environment and recent uncertainty and volatility in financial markets may make it difficult to obtain additional financing. Failure to receive additional funding in 2016 may force us to delay, scale back or otherwise modify our business and manufacturing plans, sales and marketing efforts, research and development activities and other operations, and/or seek strategic alternatives.

If we issue equity or debt securities to raise additional funds, (i) the Company may incur fees associated with such issuance, (ii) our existing stockholders will experience dilution from the issuance of new equity securities, (iii) the Company may incur ongoing interest expense and be required to grant a security interest in Company assets in connection with any debt issuance, and (iv) the new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. In addition, utilization of our net operating loss and research and development credit carryforwards may be subject to significant annual limitations under Section 382 of the Internal Revenue Code of 1986 due to ownership changes resulting from future equity financing transactions. If we raise additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish valuable rights to our potential products or proprietary technologies, or grant licenses on terms that are not favorable to the Company.

The extent to which we utilize the facility with Aspire as a source of funding will depend on a number of factors,

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including the prevailing market price of our common stock, the volume of trading in our common stock and the extent to which we are able to secure funds from other sources. The purchase agreement contains limitations on the number of shares that we may sell to Aspire. Additionally, we and Aspire may not effect any sales of shares of our common stock under the purchase agreement during the continuance of an event of default or on any trading day that the closing sale price of our common stock is less than \$0.50 per share. Even if we are able to access the full \$20,000 under the purchase agreement, we may need additional capital to fully implement our business, operating and development plans.

Net cash of \$21,863 was used by continuing operations for operating activities during the twelve months ended December 31, 2015, compared to net cash used by continuing operations during 2014 of \$23,691. Net cash used by continuing operations during the twelve months ended December 31, 2015 primarily reflects the net loss for the year partially offset by non-cash expenses, including stock-based compensation expense of \$2,128, depreciation expense of \$265, inventory impairment write-downs totaling \$209 and the Company's 401(k) stock matching contribution expense of \$323. Net cash of \$23,691 was used by continuing operations for operating activities for the year ended December 31, 2014 compared to \$23,657 during 2013. During the twelve months ended December 31, 2014, net cash used in all operating activities of \$24,536 included \$845 of net cash used by our discontinued German operations.

Net cash of \$614 was used by continuing operations for investing activities during the twelve months ended December 31, 2015, compared to net cash provided by investing activities during 2014 of \$11,380. Net cash used by investing activities during the twelve months ended December 31, 2015 is primarily the result of expending funds for the purchase of property and equipment to expand our pilot manufacturing capacity. There was no net cash provided by investing activities or used to purchase investments during the twelve months ended December 31, 2015. Net cash of \$11,380 was provided by continuing operations for investing activities during the year ended December 31, 2014 compared to \$19,788, during 2013. Net cash provided by investing activities during the twelve months ended December 31, 2014 included \$13,017 provided by the sale and maturity of investments, partially offset by \$1,508 used to purchase investments. In addition, \$292 of net cash was provided by discontinued operations for investing activities in relation to the sale of Metabolix GmbH to Akro-Plastics.

Net cash of \$14,703 was provided by financing activities during the twelve months ended December 31, 2015, compared to net cash provided by financing activities during 2014 of \$25,214. Net cash provided by financing activities during the twelve months ended December 31, 2015 included proceeds from the completion of a \$15,000 private placement of equity securities during the second quarter. Issuance costs for this private placement totaled \$297. Net cash of \$25,214 was provided by financing activities during the twelve months ended December 31, 2014, compared to \$14, during 2013. Net cash provided by financing activities during the twelve months ended December 31, 2014 included \$24,914 in proceeds, net of \$86 of issuance costs, from the Company's private placement of equity securities completed during the third quarter and \$300 in cash received from the purchase of shares by our Chief Executive Officer pursuant to his employment agreement.

Off-Balance Sheet Arrangements

As of December 31, 2015, 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

The Company rents its facilities under operating leases, which expire at various dates through December 2026. At December 31, 2015, the Company's future minimum payments required under operating leases are as follows:

	Payments Due by Period				
	Total	Less than 1 year	2-3 years	4-5 years	More than 5 years
Operating lease obligations	\$ 6,516	\$ 1,487	\$ 2,942	\$ 2,087	\$ —
Purchase obligations	4,672	3,272	1,400	—	—
Total	\$ 11,188	\$ 4,759	\$ 4,342	\$ 2,087	\$ —

Our primary obligations relate to office, laboratory space and the fixed portion of certain manufacturing purchase commitments related to future biopolymer production. We currently lease approximately 28,000 square feet of office and research and development space at 21 Erie Street, Cambridge, Massachusetts. We have entered into an agreement with the landlord to terminate this lease effective July 31, 2016. On January 20, 2016, we entered into a lease for approximately 30,000 square feet of office and research and development space at 19 Presidential Way, Woburn, Massachusetts. This lease

has a term of 10 years and six (6) months and commences on June 1, 2016, subject to adjustment depending on the date that renovations of the premises are substantially completed. We also lease office and laboratory space at 650 Suffolk Street, Lowell, Massachusetts where the majority of our general and administrative employees are located. Our lease for this facility expires in May 2020, with the option to renew for one five-year period. We have a one-time option to terminate the lease early effective May 2017 with appropriate advance notice. Our wholly-owned subsidiary, Metabolix Oilseeds, Inc., located in Saskatoon, Saskatchewan, Canada, leases approximately 2,000 square feet of office, laboratory and greenhouse space. The leases for these facilities expire during 2016.

In connection with our plans to increase biopolymer production capacity, during May 2015, we entered into agreements with a U.S. supplier of toll fermentation services and with the owner/operator of our expanded pilot recovery facility. Under the fermentation services agreement, the Company is obligated to pay fixed toll fermentation service fees of approximately \$600 per quarter from February 2016 until July 2017. During May 2015, we prepaid \$1,000 for these future fermentation services which is included in prepaid expenses and other current assets in the Company's balance sheet at December 31, 2015. We are currently paying contractual fixed fees of approximately \$520 per quarter for our resin recovery facility that will continue until at least December 31, 2016. In addition to the fixed charges due under these agreements, the Company is obligated to pay certain variable production costs as incurred. The fixed portion of the manufacturing service fees is included within our minimum payment obligation table shown above.

Related Party Transactions

We entered into sublicense agreements in 1999 and 2003 with Tepha Inc. ("Tepha"), a related party, to sublicense certain technology to Tepha. The sublicenses contain provisions for us to receive maintenance fees, milestone payments, royalties on product sales and a share of sublicensing revenues received by Tepha.

See Note 9 to our consolidated financial statements for a full description of our related party transactions.

Recent Accounting Standards Changes

For a discussion of recent accounting standards please read Note 2, Summary of Significant Accounting Policies, to our consolidated financial statements included in this report.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Our exposure to market risk is confined to our cash, cash equivalents and marketable securities. The unrestricted cash and cash equivalents and marketable securities are held for working capital purposes. Our primary investment objective is capital preservation, with a secondary objective of generating income on such capital. We do not enter into investments for trading or speculative purposes.

Interest Rate Risk

We historically invest in high-quality financial instruments, primarily money market funds, federal agency notes, U.S. treasury notes, investment-grade commercial paper, and corporate debt securities. All of our interest-bearing securities are subject to interest rate risk and could decline in value if interest rates fluctuate. Because of the short-term maturities of our current cash equivalents and short-term investments, we do not believe that an increase in market rates would have any significant impact on the realized value of our marketable securities. However, in a declining interest rate environment, as short-term investments mature, reinvestment occurs at less favorable interest rates which would negatively impact our investment income. Exposure to market rate risk for changes in interest rates relates to our unrestricted cash and cash equivalents, totaling \$12,269 at December 31, 2015. Based on a hypothetical 10% adverse movement in interest rates, we believe the potential annual losses in future earnings and cash flows would be immaterial.

Currency Exchange Rates

We have foreign currency exposure to exchange rate fluctuations and particularly with respect to the Canadian dollar. Therefore, our investment in our subsidiaries is sensitive to fluctuations in currency exchange rates. The effect of a change in currency exchange rates on our net investment, including intercompany loans and payables, in international subsidiaries is reflected in the accumulated other comprehensive (loss) income component of stockholders' equity. If rates of exchange for the Canadian dollar were to have depreciated immediately and uniformly by 10% relative to the U.S. dollar from levels at December 31, 2015, the impact to stockholders' equity would be immaterial.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The consolidated financial statements and related financial statement schedules required to be filed are indexed on page F-1 and are incorporated herein.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Effectiveness of Disclosure Controls and Procedures

As of the end of the period covered by this Annual Report on Form 10-K, under the supervision of our Chief Executive Officer and our Chief Accounting Officer, we evaluated the effectiveness of our disclosure controls and procedures, as such term is defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act. Based on this evaluation, our Chief Executive Officer and our Chief Accounting Officer concluded that as of December 31, 2015 our disclosure controls and procedures are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act (1) is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and (2) is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Accounting Officer, as appropriate to allow timely decisions regarding required disclosure. Our disclosure controls and procedures include components of our internal control over financial reporting. Management's assessment of the effectiveness of our internal control over financial reporting is expressed at the level of reasonable assurance because a control system, no matter how well designed and operated, can provide only reasonable, but not absolute, assurance that the control system's objectives will be met.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2015. In making this assessment, management used the criteria set forth in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

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Based on its assessment of internal control over financial reporting, management has concluded that, as of December 31, 2015, our internal control over financial reporting was effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) of the Exchange Act that occurred during our last fiscal quarter in the period covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The following table sets forth the directors of the Company, the year each such director was first elected a director, the positions with the Company currently held by each such director, the year each director's current term will expire, and each director's current class:

Nominee's or Director's Name	Year First Became Director	Position(s) with the Company	Year Current Term Will Expire	Current Director Class
Peter N. Kellogg	2007	Director	2016	I
Celeste Beeks Mastin	2012	Director	2016	I
Robert L. Van Nostrand	2006	Director	2016	I
Oliver P. Peoples, Ph.D.	1992	Chief Scientific Officer, Director	2017	II
Joseph Shaulson	2013	President, Chief Executive Officer, Director	2017	II
Anthony J. Sinsky, Sc.D.	1992	Director	2018	III
Matthew Strobeck, Ph.D.	2006	Director	2018	III

DIRECTORS AND EXECUTIVE OFFICERS

The Company's executive officers are appointed on an annual basis by, and serve at the discretion of the Board. Each executive officer is a full-time employee of Metabolix. The following table sets forth the directors and executive officers of the Company, their ages, and the positions currently held by each such person with the Company:

Name	Age	Position
Peter N. Kellogg(1)	60	Director
Celeste Beeks Mastin(2)(3)	47	Director
Oliver P. Peoples, Ph.D.	58	Chief Scientific Officer, Director
Joseph Shaulson	50	President and Chief Executive Officer, Director
Anthony J. Sinskey, Sc.D.(2)(3)	76	Director
Matthew Strobeck, Ph.D.(1)	43	Director
Robert L. Van Nostrand(1)(2)	59	Chairman of the Board, Director
Charles B. Haaser	60	Chief Accounting Officer and Treasurer
Johan van Walsem	53	Chief Operating Officer
Lynne H. Brum	52	Vice President, Marketing and Corporate Communications
Sarah P. Cecil	64	General Counsel and Secretary

-
- (1) Member of the Audit Committee
 - (2) Member of the Compensation Committee
 - (3) Member of the Nominating and Corporate Governance Committee

BIOGRAPHICAL INFORMATION

Peter N. Kellogg has served as a director of Metabolix since March 2007. He was named Executive Vice President and Chief Financial Officer of Celgene Corporation in August 2014. Previously, Mr. Kellogg was Chief Financial Officer and Executive Vice President of Merck & Co. Inc. since August 2007. From 2000 to 2007, Mr. Kellogg served as Chief Financial Officer and Executive Vice President of Finance (since 2003) at Biogen Idec Inc. and the former Biogen, Inc. Before that, he served as Senior Vice President, PepsiCo E-Commerce at PepsiCo Inc. from March to July 2000 and as Senior Vice President and Chief Financial Officer, Frito-Lay International, from March 1998 to March 2000. From 1987 to 1998, he served in a variety of senior financial, international and general management positions at PepsiCo and the Pepsi-Cola International, Pepsi-Cola North America, and Frito-Lay International divisions. Prior to joining PepsiCo, Mr. Kellogg was a senior consultant with Arthur Andersen & Co. and Booz Allen & Hamilton. He received a BSE from Princeton University in 1978 and an MBA from The Wharton School in 1982. The Board of Directors has concluded that Mr. Kellogg should serve as a director because his experience in finance, biotechnology and branded consumer products will be valuable to Metabolix. Mr. Kellogg brings valuable insights from his current and prior positions that contribute to his role on the Board. He also serves as an important resource on the Audit Committee.

Celeste Beeks Mastin became a director of the Company in January 2012. Ms. Mastin became the CEO of Distribution International, Inc., a supplier of thermal insulation, safety equipment and environmental products, in February 2013. She served from 2008 to 2011 as chief executive officer and during 2007 as chief operating officer of MMI Products, Inc., a wire products manufacturer and distributor of concrete accessories, concrete reinforcement and fencing. Prior to MMI Products, she spent 17 years in the chemical industry. At Ferro Corporation, she held the role of vice president of color and glass performance materials from 2004 to 2006, and the role of vice president of growth and development from 2006 to 2007. Ms. Mastin started her career in sales at Shell Chemical, where she served five years in sales positions of increasing responsibility. Her sales experience expanded at Bostik, Inc., where she held European and later global sales management positions, with her career at Bostik culminating in the role of vice president/general manager of nonwovens. Ms. Mastin holds a bachelor's degree in chemical engineering from Washington State University and a master's degree in business administration from the University of Houston. The Board believes that Ms. Mastin has an impressive track record of accomplishment in the global chemicals and performance materials sector. The Company expects to benefit from her deep operating experience in sales and marketing and proven leadership ability as Metabolix

develops and implements effective strategies to commercialize its leading-edge technology in both PHA bioplastics and renewable industrial chemicals.

Oliver P. Peoples, Ph.D., a co-founder of Metabolix, has served as our chief scientific officer since January 2000 and was previously our vice president of research and development. Dr. Peoples has served as a director since June 1992. Before founding Metabolix, Dr. Peoples was a research scientist with the Department of Biology at MIT. The research carried out by Dr. Peoples at MIT established the fundamental tools and methods for engineering bacteria and plants to produce polyhydroxyalkanoates. Dr. Peoples received a Ph.D. in Molecular Biology from the University of Aberdeen, Scotland. The Board believes that Dr. Peoples provides important technical and scientific understanding to the Board's analysis of Company strategy. As Chief Scientific Officer and a founder of the Company, Dr. Peoples has unique information related to the Company's research and technology and has led and directed many of our scientific research and development programs. Dr. Peoples also contributes to the Board's understanding of the intellectual property aspects of the Company's technology platforms.

Joseph Shaulson has served as our President and Chief Executive Officer since January 2014 and as a Director since December 2013. Mr. Shaulson was previously Executive Vice President of Arch Chemicals with responsibility for a variety of global businesses, including Personal Care and Industrial Biocides, Wood Protection, Performance Products and Industrial Coatings. He also led Arch's strategic planning and corporate development functions when he joined the company as Vice President, Strategic Development in 2008. Prior to Arch, Mr. Shaulson served in various leadership positions at Hexcel Corporation, an advanced composites company, including President of the Reinforcements Business Unit. Prior to Hexcel, Mr. Shaulson served as a corporate associate at the law firm of Skadden, Arps, Slate, Meagher & Flom. Mr. Shaulson received a Bachelor of Science degree in Economics and a Master of Business Administration degree from the Wharton School at the University of Pennsylvania, as well as a Juris Doctor degree from the University of Pennsylvania Law School. The Board of Directors has concluded that Mr. Shaulson should serve as a Director because he is a proven executive who has successfully led and developed global chemical and materials businesses. His broad experience with specialty products in diverse applications and dynamic end markets is valuable for Metabolix as we work to accelerate the progress of our biopolymers business and navigate through the next stage of our development and growth.

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 MIT. Currently at MIT, he serves as professor of microbiology in the Department of Biology and professor of health sciences and technology in the Harvard-MIT Health Sciences and Technology Program Engineering Systems Division, as well as faculty director of the Center for Biomedical Innovation. Dr. Sinskey serves on the board of directors of Tepha, Inc. (see "Certain Relationships and Related Person Transactions"). Dr. Sinskey received a B.S. from the University of Illinois and a Sc.D. from MIT. The Board believes that, as a faculty member of an academic institution with significant research activity in areas related to the Company's own research, Dr. Sinskey contributes to the Board his scientific knowledge and his awareness of new developments in these fields. Dr. Sinskey's involvement with other start-up and developing enterprises also makes him a valuable Board member.

Matthew Strobeck, Ph.D., served as a director from September 2006 through May 2011. Dr. Strobeck rejoined the Board in March, 2012. Dr. Strobeck is managing partner of Birchview Capital, an investment management firm. Dr. Strobeck was a partner and member of the management committee and advisory board of Westfield Capital Management from 2008 until 2011, having served as a member of the investment team, specializing in healthcare and life sciences, from May 2003 to June 2008. Dr. Strobeck is a member of the board of directors of Accelerate Diagnostics, Inc. Dr. Strobeck also serves on the board of directors of Tepha, Inc. (see "Certain Relationships and Related Person Transactions"). Dr. Strobeck received his B.S. from St. Lawrence University, a Ph.D. from the University of Cincinnati, a S.M. from Harvard University/MIT Health Sciences Technology Program, and a S.M. from the MIT Sloan School of Management. The Board believes that Dr. Strobeck's insights as a professional investor in life science companies are extremely valuable in helping Metabolix to strategically manage its technology portfolio to best realize the economic potential of our scientific opportunities.

Robert L. Van Nostrand is a consultant who has served as a director since October 2006. From January 2010 to July 2010, he was executive vice president and chief financial officer of Aureon Laboratories, Inc. From July 2007 until September 2008, Mr. Van Nostrand served as executive vice president and chief financial officer of AGI Dermatics, Inc. Mr. Van Nostrand was with OSI Pharmaceuticals, Inc. from 1986 to 2007, serving as senior vice president and chief compliance officer from May 2005 until July 2007, and as the vice president and chief financial officer from 1996 through 2005. Prior to joining OSI, Mr. Van Nostrand was in a managerial position with Touche Ross & Co. (currently Deloitte and Touche). Mr. Van Nostrand serves on the board of directors and is chairman of the audit committee and a

member of the compensation committee of Achillion Pharmaceuticals, Inc. (since 2007), serves on the board of directors and is chairman of the audit committee of Intra-Cellular Therapies, Inc. (since January 2014), serves on the boards of directors of Enumeral Biomedical, Inc. (since December 2014) and the Biomedical Research Alliance of New York (BRANY) (since 2011), and served on the board of directors and as chair of the audit committee of Apex Bioventures, Inc. from 2006 to 2009. Mr. Van Nostrand received a B.S. in Accounting from Long Island University, New York, completed advanced management studies at the Wharton School, and he is a Certified Public Accountant. The Board believes that the Company is very fortunate to have Mr. Van Nostrand serve as a director and as Chairman of our Audit Committee because of the depth of his experience and expertise in financial reporting and corporate compliance, as well as his operational experience.

Charles B. Haaser became the Company's Chief Accounting Officer effective November 3, 2014, after serving as the Company's Corporate Controller since 2008. Mr. Haaser has more than thirty years of experience in accounting and finance, primarily working for publicly traded U.S. companies. Before joining Metabolix, Mr. Haaser was the Corporate Controller of Indevus Pharmaceuticals, Inc. from 2006 to 2008. He was the Corporate Controller and Principal Accounting Officer at ABIOMED, Inc. from 1998 to 2006 and additionally served as ABIOMED's Acting Chief Financial Officer from 2003 to 2006. From 1997 to 1998 Mr. Haaser was controller for Technical Communications Corporation and from 1986 to 1997 was the Director of Finance at ISI Systems, Inc. From 1984 to 1986 Mr. Haaser was an auditor in the commercial audit division of Price Waterhouse LLP (now PricewaterhouseCoopers LLP). Mr. Haaser received a bachelor's degree in business administration (finance) from the University of Notre Dame, an MBA from Northeastern University and a Masters of Science in Taxation from Bentley University. Mr. Haaser became a Certified Public Accountant in 1997.

Johan van Walsem, chief operating officer since July 2013, returned to Metabolix in August 2009 as vice president of strategy and commercial development, following a 16 month period as senior vice president, R&D and bioprocessing at Joule Biotechnologies, a clean technology start-up company. Previously, Mr. van Walsem served as our vice president of manufacturing, development and operations from October 2003 until April 2008, and was our director of manufacturing and development from September 2001 to October 2003. Before joining Metabolix, Mr. van Walsem was senior biochemical engineer with Montec Research, a division of Resodyn Corporation, where he was responsible for fermentation technology development. Prior to that, Mr. van Walsem worked with AECI Bioproducts in South Africa in technology management and new product development. 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. He is a registered professional engineer with the Engineering Council of South Africa and a senior member of AIChE (American Institute of Chemical Engineers).

Lynne H. Brum has served as vice president, marketing and corporate communications, of the Company since November, 2011. Prior to joining Metabolix, in 2010 to 2011 she was a communications consultant and served in various roles including as a freelance project director for Seidler Bernstein Inc. Ms. Brum served from 2007 to 2009 as an executive vice president at Porter Novelli Life Sciences, a subsidiary of global PR firm, Porter Novelli International. Prior to that, Ms. Brum was responsible for corporate communications, investor relations and brand management for Vertex Pharmaceuticals, Inc. from 1994 to 2007 in various positions, including vice president of strategic communications. Ms. Brum was also a vice president at Feinstein Kean Healthcare and was part of the communications team at Biogen, Inc. (now Biogen Idec). Ms. Brum holds a bachelor's degree in biological sciences from Wellesley College and a master's degree in business administration from Simmons College's School of Management.

Sarah P. Cecil has served as legal counsel to Metabolix since July 2005 and as general counsel since the Company's initial public offering in November 2006. Previously, she was corporate counsel at Vertex Pharmaceuticals from 1992 until 2001, and at Biogen, Inc. from 1985 until 1991. Ms. Cecil's previous legal practice has also included clients in the food ingredients, computer services and clinical research industries, as well as several biotechnology companies. Ms. Cecil received an A.B. from Brown University, and she was a C.P.A. with Price Waterhouse (now PricewaterhouseCoopers) before obtaining a J.D. from Harvard Law School.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Exchange Act requires our directors, executive officers and persons who own more than ten percent of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. Such persons are required by regulations of the SEC to furnish us with copies of all such filings. Based on our review of the copies of such filings received by us with respect to the fiscal year ended December 31, 2015, we believe that all required persons complied with all Section 16(a) filing requirements.

CORPORATE GOVERNANCE AND BOARD MATTERS

Audit Committee

Mr. Van Nostrand, Mr. Kellogg and Dr. Strobeck serve on the Audit Committee. Mr. Van Nostrand is the chairman of the Audit Committee. The Board of Directors has determined that each member of the Audit Committee is independent within the meaning of the Company's and NASDAQ's director independence standards and the SEC's heightened director independence standards for Audit Committee members as determined under the Exchange Act. The Board of Directors has also determined that Mr. Kellogg and Mr. Van Nostrand also qualify as "Audit Committee financial experts" under the rules of the SEC.

Executive Sessions

The Board of Directors generally holds executive sessions of the independent directors following regularly scheduled in-person meetings of the Board of Directors, at least four times a year. Executive sessions do not include any employee directors of the Company.

Compensation Risk Assessment

The Compensation Committee believes that our employee compensation policies and practices are not structured to be reasonably likely to present a material adverse risk to the Company. We believe we have allocated our compensation among base salary and short- and long-term incentive compensation opportunities in such a way as to not encourage excessive or inappropriate risk-taking by our executives and other employees. We also believe our approach to goal setting and evaluation of performance results reduce the likelihood of excessive risk-taking that could harm our value or reward poor judgment.

Code of Business Conduct and Ethics

The Company has adopted the Code of Business Conduct and Ethics ("Code of Business Conduct") as its "code of ethics" as defined by regulations promulgated under the Securities Act of 1933, as amended (the "Securities Act"), and the Exchange Act (and in accordance with the NASDAQ requirements for a "code of conduct"), which applies to all of the Company's directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A current copy of the Code of Business Conduct is available at the Company's website at <http://www.metabolix.com> under "Investor Relations—Corporate Governance." A copy of the Code of Business Conduct may also be obtained free of charge from the Company upon a request directed to Metabolix, Inc., 21 Erie Street, Cambridge, MA 02139, Attention: Investor Relations. The Company will promptly disclose any substantive changes in or waivers, along with reasons for the waivers, of the Code of Business Conduct granted to its executive officers, including its principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, and its directors by posting such information on its website at <http://www.metabolix.com> under "Investor Relations—Corporate Governance."

ITEM 11. EXECUTIVE COMPENSATION**SUMMARY COMPENSATION TABLE**

The following table summarizes the compensation earned during the years ended December 31, 2015 and 2014 by our "principal executive officer" and the two other most highly paid executive officers who were serving as executive officers on December 31, 2015 (our named executive officers):

Name and Principal Position	Year	Salary	Bonus	Stock Awards(1)	Option Awards(1)	Non-Equity Incentive Plan Compensation(2)	All Other Compensation(3)	Total
Joseph Shaulson, President and Chief Executive Officer	2015	\$ 350,000	—	\$ 762,300	—	\$ 210,000	\$ 71,925	\$ 1,394,225
	2014	\$ 348,674	—	\$ 327,000	\$ 31,525	\$ 208,000	\$ 71,700	\$ 986,899
Johan van Walsem, Chief Operating Officer	2015	\$ 295,000	—	\$ 573,300	—	\$ 177,000	\$ 11,925	\$ 1,057,225
	2014	\$ 295,000	—	—	—	\$ 176,000	\$ 11,700	\$ 482,700
Oliver P. Peoples, Ph.D., Chief Scientific Officer	2015	\$ 240,000	—	\$ 396,900	—	\$ 144,000	\$ 11,925	\$ 792,825
	2014	\$ 225,091	—	—	—	\$ 143,000	\$ 11,700	\$ 379,791

- (1) The amounts listed in the "Stock Awards" and "Option Awards" columns do not represent the actual amounts paid in cash to or value realized by the named executive officers. These amounts represent the aggregate grant date fair value of restricted stock units and stock option awards for each individual computed in accordance with FASB ASC Topic 718. For a discussion of valuation assumptions, see Note 12 to our 2015 Consolidated Financial Statements, and Note 13 to our 2014 Consolidated Financial Statements included in our Annual Reports on Form 10-K for the years ended December 31, 2015 and 2014, respectively.
- (2) 2015 Non-Equity Incentive Plan Compensation represents bonus amounts paid in March 2016 based on the Compensation Committee's review of corporate performance for fiscal 2015 pursuant to the Company's executive cash incentive performance bonus program described in the Narrative Disclosure below. 2014 Non-Equity Incentive Plan Compensation represents bonus amounts paid in March 2015 based on the Compensation Committee's review of corporate and individual performance for fiscal 2014 pursuant to the Company's executive cash incentive performance bonus program. Mr. Shaulson and Mr. van Walsem elected to receive \$208,000 and \$26,400, respectively, of their cash bonuses in the form of RSUs valued at 2.5 times the converted bonus amount, vesting one year after the date of grant.
- (3) Other Compensation for 2015 includes the value of the Company's Common Stock contributed to the Company's 401(k) plan as a matching contribution. In Mr. Shaulson's case, Other Compensation also includes \$60,000 paid to him for temporary living and commuting costs.

Narrative Disclosure to Summary Compensation Table***Base Salaries***

Base salary levels for the named executive officers remained unchanged during 2015 as compared to 2014. Since 2008 there have been no increases in base salaries for the named executive officers other than in connection with promotions.

Pay for Performance

Executive bonuses are based on overall corporate performance, to recognize and reward the teamwork of the named executive officers in advancing corporate goals, although the Compensation Committee retains the discretion to adjust individual bonus amounts in exceptional cases. Keeping both base salaries and target bonus percentages unchanged over the years as peer group salaries have risen resulted in cash incentives, as well as base salaries, for our executives being generally below market. Therefore the Compensation Committee increased named executive officer target bonuses to 75% of base salary beginning in 2015.

In 2015, the Company's corporate goals were to:

- Execute the Company's biopolymers business strategy;

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- Secure financing;
- Build a specialty materials business culture; and
- Maintain focus and manage the Company's cash usage rate.

In early 2016 the Compensation Committee reviewed corporate performance for 2015 and determined that the Company's successes in manufacturing, cash management and obtaining financing were partially offset by commercial progress that was below expectations. The goal of executing the biopolymers commercial strategy were subjectively weighted more heavily than the other goals. As a result, the committee decided to base 2015 bonuses on an overall Company performance rating of 80%, as compared to 85% for 2014. Bonuses for the named executive officers were determined by applying the 2015 corporate performance rating (80%) to each individual's target bonus amount (75% of the respective base salary).

Long-Term Incentives

After completing a review of executive equity compensation in March 2015, the Compensation Committee decided to award long-term incentives in 2015 in the form of restricted stock units ("RSUs") rather than stock options, as had been the Company's previous practice. The committee concluded that, under current circumstances, RSUs would provide a stronger incentive and retention tool than stock options. In determining the number of RSUs to be awarded, the committee sought to provide a long-term incentive value for our named executive officers ranging from approximately 85% to 150% of base salary per year. Because no equity incentives were granted to executives during 2014, the 2015 grants were generally twice the annual target amount, adjusted in Mr. Shaulson's case to take into account the equity awards made to him in connection with the commencement of his employment. RSUs vesting in four (4) equal annual installments over a period of four (4) years from the date of grant were awarded as follows:

Named Executive Officer	Number of RSUs
Joseph Shaulson	201,667
Johan van Walsem	151,667
Oliver P. Peoples	105,000

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

The following table summarizes stock option and restricted stock awards held by our named executive officers at December 31, 2015:

Name	Grant Date	Option Awards				Stock Awards			
		Number of Securities Underlying Unexercised Options(#) Exercisable	Number of Securities Underlying Unexercised Options(1)	Option Exercise Price(\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)(2)	Equity Incentive Plan Awards: Number of Units That Have Not Vested (#)(3)	Equity Incentive Plan Awards: Market Value of Units of Stock That Have Not Vested (\$)(2)(3)
Joseph Shaulson	12/19/2013	—	191,667	\$ 7.98	12/19/2023				
	1/2/2014							100,000	\$ 154,000
	4/1/2015 (4)					137,566	211,852	—	\$ —
	4/1/2015 (5)					201,667	310,567	—	\$ —
Johan van Walsem	8/21/2009	8,334	—	\$ 63.24	8/21/2019	—	—	—	\$ —
	5/27/2010	7,500	—	\$ 86.94	5/27/2020	—	—	—	\$ —
	5/19/2011	7,500	—	\$ 43.50	5/19/2021	—	—	—	\$ —
	2/1/2012	14,063	937	\$ 15.96	2/1/2022	—	—	—	\$ —
	9/18/2012	20,833	—	\$ 9.30	9/18/2022	—	—	—	\$ —
	5/30/2013	7,293	4,374	\$ 10.14	5/30/2023	—	—	—	\$ —
	7/22/2013	9,375	7,292	\$ 8.88	7/22/2023	—	—	—	\$ —
	4/1/2015 (4)					17,460	26,888	—	\$ —
	4/1/2015 (5)					151,667	233,567	—	\$ —
Oliver P. Peoples	5/17/2007	6,667	—	\$ 143.94	5/17/2017	—	—	—	\$ —
	3/5/2008	6,667	—	\$ 90.00	3/5/2018	—	—	—	\$ —
	5/28/2009	6,667	—	\$ 41.58	5/28/2019	—	—	—	\$ —
	5/27/2010	7,500	—	\$ 86.94	5/27/2020	—	—	—	\$ —
	5/19/2011	7,501	—	\$ 43.50	5/19/2021	—	—	—	\$ —
	2/1/2012	14,063	937	\$ 15.96	2/1/2022	—	—	—	\$ —
	9/18/2012	20,833	—	\$ 9.30	9/18/2022	—	—	—	\$ —
	5/30/2013	7,293	4,374	\$ 10.14	5/30/2023	—	—	—	\$ —
	4/1/2015 (5)					105,000	161,700	—	\$ —

(1) All stock options that are not yet fully exercisable vest in equal quarterly installments over a period of four years from the grant date, except for Mr. Shaulson's stock

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option. Mr. Shaulson's stock option was granted to him in connection with his agreement to serve as a member of the Company's Board on the date of grant and as an inducement for him to accept employment with the Company as its President and Chief Executive Officer. This option has a four-year vesting schedule in which 25%, 25% and 50% of the option vests on the 2nd, 3rd and 4th anniversary dates, respectively, of Mr. Shaulson commencing employment.

- (2) The aggregate market value of the unvested RSUs as shown in the table is based on \$1.54 per share, the closing price per share of the Company's common stock on December 31, 2015.
- (3) These RSUs were issued to Mr. Shaulson pursuant to his employment contract. The RSUs were to vest in various percentages over three years (subject to continued vesting upon termination without cause and other employment termination events) once certain Company stock price and/or revenue based targets were achieved, subject to forfeiture if the targets were not achieved by January 2, 2016. The targets were not achieved by that date, and accordingly these RSUs were forfeited.
- (4) Mr. Shaulson and Mr. van Walsem elected to receive \$208,000 and \$26,400, respectively, of their 2014 cash bonuses in the form of RSUs valued at 2.5 times the converted bonus amount. These RSUs will vest in full one (1) year after the grant date; provided, however, that if prior to the vesting date the grantee's employment is terminated by the Company for cause or the grantee voluntarily terminates his employment with the Company, such RSUs will be forfeited and will not vest.
- (5) These RSUs will vest in four equal annual installments over a period of four years from the grant date.

Executive Employment Agreements

Joseph Shaulson. The Company has an employment contract with Joseph Shaulson, our chief executive officer, which will expire on January 2, 2017. The agreement will automatically renew from year to year unless either party gives written notice of non-renewal. Under the agreement, Mr. Shaulson receives the following compensation in connection with his service as the president and CEO: an annual base salary of \$350,000, subject to increase to \$425,000 if the Company achieves certain revenue targets, and an annual cash bonus of up to 140% of base salary with a target bonus of no less than 70% of base salary, subject to the achievement of performance goals.

If during the term of the agreement Mr. Shaulson's employment is terminated without cause or he terminates his employment for good reason (as defined in the agreement), Mr. Shaulson will be entitled to severance of 1.7 times his base salary, provided that he signs and does not revoke a general release. In addition, the vesting of all unvested equity will continue as scheduled, and the exercise period for all equity awards will be extended. The agreement provides that if Mr. Shaulson's employment is terminated after a change of control of the Company, instead of the foregoing severance benefits the vesting of all unvested equity will be accelerated, and he will receive a lump sum payment equal to two times the sum of (A) his then current base salary plus (B) either the average of the bonuses received by him (if any) for the two immediately preceding fiscal years, or, if the second year bonus has not yet been determined, his target bonus of 70% of base salary. If any portion of the severance payments, benefits and vesting constitutes an "excess parachute payment" within the meaning of Section 280G of the Internal Revenue Code, the Company will make an additional gross-up payment of up to \$500,000 that, after reduction for all taxes with respect to such gross-up payment, equals the excise tax with respect to the excess parachute payments.

Johan van Walsem. The Company has an employment agreement with Johan van Walsem, chief operating officer, expiring on August 17, 2016. The agreement will automatically renew from year to year unless either party gives written notice of non-renewal. The agreement includes minimum salary and target bonus percentage levels and provides that Mr. van Walsem is eligible to receive a performance bonus of up to 150% of his base salary, depending on the Compensation Committee's assessment of achievement of individual and Company goals. Pursuant to the terms of the agreement with Mr. van Walsem, if the Company terminates Mr. van Walsem's employment without "cause" or if he terminates his employment for "good reason" (each, 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 the Company, for the period of twelve months following the termination he will be entitled to continuation of his base salary and payment of COBRA premiums. If the Company terminates Mr. van Walsem's employment without cause or if the executive terminates his employment for "good reason" within the 12-month period immediately following, or the 6-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, the Company will continue Mr. van Walsem's base salary and payment of COBRA premiums, and (ii) vesting of all of Mr. van Walsem's equity will be accelerated, subject to certain conditions. To the extent Mr. van Walsem would be subject to tax under Section 4999 of the Internal Revenue Code as a result of company payments and benefits, the payments and benefits will be reduced if the reduction would maximize his total after-tax payments.

Oliver P. Peoples. The Company has an employment agreement with Oliver P. Peoples, chief scientific officer. The agreement includes a minimum salary level and provides that Dr. Peoples will be eligible to receive annual bonuses based on individual and Company performance. Pursuant to the terms of Dr. Peoples' agreement, if the Company terminates Dr. Peoples' employment without "cause" or if Dr. Peoples terminates his employment for "good reason" (each, as defined in the agreement), he will be entitled to a lump-sum cash payment equal to 24 months' base salary and a pro rata portion of the target bonus for the year in which termination occurs, plus payment of COBRA premiums for 24 months. If the Company terminates Dr. Peoples' employment without cause or if Dr. Peoples terminates his employment for "good reason" 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, Dr. Peoples will receive: (i) a lump-sum cash payment equal to two times the sum of his then-current base salary plus 50% of his then-current target bonus, (ii) payment of COBRA premiums for 24 months, and (iii) full vesting of his stock options. To the extent Dr. Peoples would be subject to tax under Section 4999 of the Internal Revenue Code as a result of company payments and benefits, the payments and benefits will be reduced if the reduction would maximize his total after-tax payments.

Noncompetition Agreements. Mr. Shaulson signed an employee noncompetition, nondisclosure and inventions agreement which prohibits him, during his employment by us and for a period of one year thereafter, from engaging in certain business activities which are directly or indirectly in competition with the products or services being developed, manufactured, marketed, distributed, planned, or sold by the Company during the term of his employment. Each of our other named executive officers has signed an employee noncompetition, nondisclosure and inventions agreement prohibiting the executive, during his or her employment by us and for a period of two years thereafter, from engaging in certain 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.

DIRECTOR COMPENSATION

The following table summarizes the compensation earned by our non-employee directors in 2015:

Name	Fees Earned or Paid in Cash (\$)(1)	Stock Awards (\$)(2)	Total (\$)
Peter N. Kellogg	\$ 35,000	\$ 27,875	\$ 62,875
Celeste Beeks Mastin	\$ 40,000	\$ 27,875	\$ 67,875
Anthony J. Sinskey, Sc.D.	\$ 45,000	\$ 27,875	\$ 72,875
Matthew Strobeck, Ph.D.	\$ 17,500	\$ 27,875	\$ 45,375
Robert L. Van Nostrand	\$ 50,000	\$ 69,688	\$ 119,688

- (1) Represents fees for the year 2015. All such fees were paid during 2015. Mr. Strobeck has waived all cash compensation for Board and committee membership beginning with the third quarter of 2015.
- (2) Represents the aggregate grant date fair value of RSU awards for each individual computed in accordance with FASB ASC Topic 718. For a discussion of valuation assumptions, see Note 12 to our 2015 Consolidated Financial Statements included in this Annual Report on Form 10-K for the year ended December 31, 2015. In January 2016 Mr. Strobeck relinquished all rights and interests in the RSU that was granted to him in September 2015.

Narrative to Director Compensation Table

Under the Company's policy for compensation of non-employee directors, each non-employee member of our Board of Directors is entitled to an annual retainer of \$30,000. In addition, the chairs of the Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee are entitled to an additional annual retainer of \$15,000, \$10,000 and \$10,000, respectively. Each non-employee director serving as a member but not chair of our Audit Committee, Compensation Committee and Nominating and Corporate Governance Committee receives an annual retainer of \$5,000.

In 2015, after a review of the Company's historical equity incentive program for non-employee directors and an informal review of director compensation at selected peer companies, the Board awarded RSUs under the Company's 2014 Stock Option and Incentive Plan to the non-employee directors for the numbers of shares set forth below:

Chairman of the Board 31,250 RSUs

Each other Non-Employee Director 12,500 RSUs

These RSUs will vest in full on May 28, 2016 (one (1) year after the date of the 2015 annual meeting of stockholders); provided, however, that if prior to the vesting date the grantee's membership on the Board of Directors is terminated by the Company for cause or the grantee voluntarily resigns from the Board of Directors of the Company, the RSUs will be forfeited and will not vest. As of December 31, 2015, our non-employee directors had outstanding stock options and RSUs as follows:

Name	Stock Options	
	Outstanding	RSUs Outstanding
Peter N. Kellogg	25,002	12,500
Celeste Beeks Mastin	16,667	12,500
Anthony J. Sinskey, Sc.D.	25,002	12,500
Matthew Strobeck, Ph.D.	16,667	12,500
Robert L. Van Nostrand	27,502	31,250

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding beneficial ownership of the Company's Common Stock as of March 23, 2016: (i) by each person known to us to be the beneficial owner of more than 5% of our outstanding shares of Common Stock; (ii) by each of our directors and nominees; (iii) by each of our named executive officers; and (iv) by all of our directors and executive officers as a group. Unless otherwise noted below, the address of each person listed on the table is c/o Metabolix, Inc., 21 Erie Street, Cambridge, Massachusetts 02139.

Beneficial Owner	Shares of Common Stock(1)	Options Exercisable Within 60 Days(2)	Warrants Exercisable Within 60 Days (2)	RSUs Vesting Within 60 days(2)	Total Shares Beneficially Owned	Percentage of Outstanding Shares(3)
5% Stockholders:						
Jack W. Schuler(4) 28161 North Keith Drive Lake Forest, IL 60045	11,969,795	—	2,996,712	—	14,966,507	49.3%
William P. Scully(5) 771 Manatee Cove Vero Beach, FL 32963	3,166,666	—	—	—	3,166,666	11.6%
Directors, Nominees and Named Executive Officers:						
Peter N. Kellogg	—	25,002	—	—	25,002	*
Celeste Beeks Mastin	—	16,667	—	—	16,667	*
Oliver P. Peoples(6)	216,757	78,857	13,113	26,250	334,977	1.2%
Joseph Shaulson(7)	85,085	47,917	31,500	187,983	352,485	1.3%
Anthony J. Sinskey(8)	59,890	25,002	—	—	84,892	*
Matthew Strobeck(9)	2,284,934	16,667	131,103	—	2,432,704	8.8%
Robert L. Van Nostrand	3,333	27,502	—	—	30,835	*
Johan van Walsem(10)	125,780	78,647	10,800	55,377	270,604	1%
All directors and executive officers as a group (11 persons)(11)	2,818,487	401,475	199,629	332,046	3,751,637	13.7%

* less than 1%.

- (1) Beneficial ownership, as such term is used herein, is determined in accordance with Rule 13d-3(d)(1) promulgated under the Securities Exchange Act of 1934, as amended, and includes voting and/or investment power with respect to shares of our Common Stock. Unless otherwise indicated, the named person possesses sole voting and investment power with respect to the shares.
- (2) Consists of shares of Common Stock subject to stock options, warrants and restricted stock units ("RSUs") held by the person that are currently vested or will vest within 60 days after March 23, 2016.

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- (3) Percentages of ownership are based upon 27,369,390 shares of Common Stock issued and outstanding as of March 23, 2016. Shares of Common Stock that may be acquired pursuant to options, warrants and RSUs that are vested and exercisable within 60 days after March 23, 2016 are deemed outstanding for computing the percentage ownership of the person holding such options, but are not deemed outstanding for the percentage ownership of any other person.
- (4) Information regarding Mr. Schuler is based solely on a Schedule 13D/A filed with the SEC on June 23, 2015. According to such Schedule 13D/A, Mr. Schuler reported sole voting and dispositive power as to 3,684,008 shares and shared voting and dispositive power as to 11,282,499 shares.
- (5) Information regarding Mr. Scully is based solely on a Schedule 13D/A filed with the SEC on January 7, 2016. According to such Schedule 13D/A, Mr. Scully reported sole voting power and sole dispositive power as to all of the shares.
- (6) Includes 7,806 shares held for Dr. Peoples in the Company's 401(k) plan.
- (7) Includes 8,419 shares held for Mr. Shaulson in the Company's 401(k) plan.
- (8) Includes 8,224 shares owned by Dr. Sinskey's spouse and 1,666 shares owned by a trust over which Dr. Sinskey may be deemed to share voting and investment power. Dr. Sinskey disclaims beneficial ownership of such shares.
- (9) Includes 710,366 shares held by Birchview Fund, LLC and 39,330 shares subject to warrants held by Birchview Fund, LLC. Mr. Strobeck is the sole member of Birchview Capital GP, LLC (the "GP"), the general partner of Birchview Capital, LP (the "Investment Manager"), which is the investment Manager of Birchview Fund, LLC (the "Fund") and the sole member of Birchview Partners, LLC (the "Manager"), which is a member of the Fund. Mr. Strobeck disclaims Section 16 beneficial ownership of the shares of Common Stock held by the Fund (collectively, the "Fund Shares"), except to the extent of his pecuniary interest, if any, in the Fund Shares by virtue of his membership interest in the GP. Also includes 66,664 shares held in accounts for minor children for which Dr. Strobeck serves as a custodian, 14,949 shares held by Dr. Strobeck's spouse as custodian for their children, and 6,819 shares held indirectly by a trust for the benefit of Dr. Strobeck's children. Dr. Strobeck is a trustee of the trust. Dr. Strobeck disclaims beneficial ownership of these shares except to the extent of his pecuniary interest in them, if any.
- (10) Includes 8,447 shares held for Mr. van Walsem in the Company's 401(k) plan.
- (11) Includes a total of 50,895 shares held for current executive officers in the Company's 401(k) plan.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table provides information about the Common Stock that may be issued upon the exercise of options, warrants and rights under all the Company's existing equity compensation plans as of December 31, 2015.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by stockholders(1)	1,899,239	\$14.1077	3,187,115
Equity compensation plans not approved by stockholders(2)	291,667	\$5.2440	—

- (1) Consists of the 2005 Stock Option and Incentive Plan, the 2006 Stock Option and Incentive Plan and the 2014 Stock Option and Incentive Plan. For a description of these plans see Note 12 to our 2015 Consolidated Financial Statements included in this Annual Report on Form 10-K for the year ended December 31, 2015.
- (2) Includes a stock option granted to Mr. Shaulson in connection with his agreement to serve as a member of the Company's Board on the date of grant and as an inducement for him to accept employment with the Company as its President and Chief Executive Officer and RSUs issued to Mr. Shaulson pursuant to his employment contract. The stock option has a four-year vesting schedule in which 25%, 25% and 50% of the option vests on the 2nd, 3rd and 4th anniversary dates,

respectively, of Mr. Shaulson commencing employment. The RSUs were to vest in various percentages over three years (subject to continued vesting upon termination without cause and other employment termination events) once certain Company stock price and/or revenue based targets were achieved, subject to forfeiture if the targets were not achieved by January 2, 2016. The targets were not achieved by that date, and accordingly these RSUs were forfeited.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

The charter of the Nominating and Corporate Governance Committee provides that the committee shall conduct an appropriate review of all related party transactions (including those required to be disclosed pursuant to Item 404 of Regulation S-K) for potential conflict of interest situations on an ongoing basis, and the approval of that committee shall be required for all such transactions.

Also, under the Company's Code of Business Conduct, any transaction or relationship that reasonably could be expected to give rise to a conflict of interest involving an employee must be reported promptly to the Company's General Counsel, who has been designated as the Company's Compliance Officer. The Compliance Officer may notify the Board of Directors or a committee thereof as she deems appropriate. Actual or potential conflicts of interest involving a director, executive officer or the Compliance Officer must be disclosed directly to the Chairman of the Board of Directors.

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. The Company believes that it has executed all of the transactions set forth below on terms no less favorable to us than could have been obtained from unaffiliated third parties.

Metabolix has agreements with Tephra, Inc. ("Tephra") under which Metabolix licensed certain technology to Tephra. Dr. Sinskey and Dr. Strobeck, members of our Board of Directors, serve on the board of directors of Tephra. Dr. Peoples, Dr. Sinskey, and Dr. Strobeck are stockholders of Tephra, and Metabolix owns 648,149 shares of Tephra's Series A redeemable convertible preferred stock. The agreements with Tephra contain provisions for sublicense maintenance fees to be paid to Metabolix and for product-related milestone payments. Under the agreements, Metabolix also receives royalties on net sales of licensed products and sublicensing revenues received by Tephra, subject to a minimum payment each year. Metabolix recognized license and royalty revenues of approximately \$578 from Tephra for the year ended December 31, 2015. The Company believes that the terms of the agreements with Tephra are no less favorable to us than license agreements that might be entered into with an independent third party.

Independence of Members of the Board of Directors

The Board of Directors has determined that each of the Company's non-employee directors (Mr. Kellogg, Ms. Mastin, Dr. Sinskey, Dr. Strobeck, and Mr. Van Nostrand) is independent within the meaning of the director independence standards of The NASDAQ Stock Market, LLC. ("NASDAQ") and the Securities and Exchange Commission ("SEC"), including rules under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Furthermore, the Board of Directors has determined that each member of each of the Audit, Compensation and Nominating and Corporate Governance committees of the Board of Directors is independent within the meaning of the director independence standards of NASDAQ and the SEC, and that each member of the Audit Committee meets the heightened director independence standards for audit committee members as required by the SEC. In evaluating the independence of the directors, the Board considered the relationships of Dr. Sinskey and Dr. Strobeck as stockholders and members of the board of directors of Tephra, Inc. The Board determined that these relationships did not impair the independence of Dr. Sinskey or Dr. Strobeck. See "Certain Relationships and Related Person Transactions."

At least annually, a committee of the Board of Directors evaluates all relationships between the Company and each director in light of relevant facts and circumstances for the purpose of determining whether a material relationship exists that might signal a potential conflict of interest or otherwise interfere with such director's ability to satisfy his responsibilities as an independent director.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

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The Audit Committee of the Board of Directors selected the firm of PricewaterhouseCoopers LLP, an independent registered public accounting firm, to serve as independent auditors for the fiscal year ended December 31, 2015. PricewaterhouseCoopers LLP has served as the Company's independent auditors for at least the past ten years. In accordance with related requirements, PricewaterhouseCoopers LLP periodically changes certain personnel who work on the audit of the Company.

Fees

The following sets forth the aggregate fees billed by PricewaterhouseCoopers LLP to the Company during the years ended December 31, 2015 and 2014:

Audit Fees

Fees related to audit services were approximately \$525,915 for the year ended December 31, 2015 and \$508,481 for the year ended December 31, 2014. These fees relate to the audits of the Company's financial statements for the years ended December 31, 2015 and 2014, quarterly review procedures on the Company's financial statements during the years ended December 31, 2015 and 2014, comfort letters and consents in connection with benefit plan registration statements.

Audit Related Fees

There were no audit related fees for the years ended December 31, 2015 or 2014.

Tax Fees

PricewaterhouseCoopers LLP billed no fees for tax services for the fiscal years ended December 31, 2015 and 2014.

All Other Fees

PricewaterhouseCoopers LLP billed \$1,800 for each of the years ended December 31, 2015 and 2014, for the Company's license of PricewaterhouseCoopers LLP's accounting research tool.

Pre-Approval Policy of the Audit Committee

All of the services performed by PricewaterhouseCoopers LLP for the fiscal years ended December 31, 2015 and 2014 were pre-approved in accordance with the pre-approval policy set forth in the Audit Committee Charter. The Audit Committee pre-approves all audit services and permitted non-audit services performed or proposed to be undertaken by the independent registered public accounting firm (including the fees and terms thereof), except where such services are determined to be *de minimis* under the Exchange Act, giving particular attention to the relationship between the types of services provided and the independent registered public accounting firm's independence.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as part of this Report:

(1) **Financial Statements**

See Index to Financial Statements on page F-1.

(2) **Supplemental Schedules**

All schedules have been omitted because the required information is not present in amounts sufficient to require submission of the schedule, or because the required information is included in the consolidated financial statements or notes thereto.

(3) **Exhibits**

See Item 15(b) below.

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(b) The following exhibits are filed as part of, or incorporated by reference into, this Annual Report on Form 10-K:

Exhibit Number	Description
3.1 (15)	Amended and Restated Certificate of Incorporation of the Registrant.
3.2 (1)	Amended and Restated By-laws of the Registrant.
4.1 (1)	Specimen Stock Certificate for shares of the Registrant's Common Stock.
4.2 (14)	Registration Rights Agreement, dated October 7, 2015, between Metabolix, Inc. and Aspire Capital Fund, LLC
10.1 †(1)	2006 Stock Option and Incentive Plan.
10.1.1 †(1)	2006 Stock Option and Incentive Plan, Form of Incentive Stock Option Agreement.
10.1.2 †(1)	2006 Stock Option and Incentive Plan, Form of Non-Qualified Stock Option Agreement.
10.1.3 †(1)	2006 Stock Option and Incentive Plan, Form of Director Non-Qualified Stock Option Agreement.
10.2 †(11)	2014 Stock Option and Incentive Plan, Revised and Restated.
10.2.1 †(12)	2014 Stock Option and Incentive Plan, Form of Incentive Stock Option Award.
10.2.2 †(12)	2014 Stock Option and Incentive Plan, Form of Non-Qualified Stock Option Award.
10.2.3 †(12)	2014 Stock Option and Incentive Plan, Form of Restricted Stock Unit Award.
10.3 †(1)	Employment Agreement between the Company and Oliver P. Peoples dated July 20, 2006.
10.3.1 †(4)	First Amendment to Employment Agreement between the Company and Oliver P. Peoples executed December 19, 2008.
10.3.2 †(4)	Second Amendment to Employment Agreement between the Company and Oliver P. Peoples executed February 25, 2009.
10.4 †(12)	Severance Agreement between the Company and Charles B. Haaser dated January 5, 2015.
10.5 †(8)	Severance Agreement between the Company and Sarah P. Cecil executed July 1, 2013.
10.6 †(3)	Employment Agreement between the Company and Johan van Walsem executed July 9, 2009.
10.6.1 †(8)	Letter Agreement between the Company and Johan van Walsem executed on July 12, 2013.
10.7 †(5)	Employment Agreement between the Company and Lynne H. Brum executed November 14, 2011.
10.8 †(9)	Employment Agreement between the Company and Joseph Shaulson dated December 19, 2013.
10.9 †(9)	Noncompetition, Confidentiality and Inventions Agreement between the Company and Joseph Shaulson dated December 19, 2013.
10.10 †(10)	Non-Qualified Stock Option Agreement between the Company and Joseph Shaulson dated December 19, 2013.
10.11 †(10)	Restricted Stock Unit Award Agreement between the Registrant and Joseph Shaulson dated March 24, 2014.
10.12 †(1)	Form of Employee Noncompetition, Nondisclosure and Inventions Agreement with Oliver P. Peoples and Johan van Walsem.

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10.13	†(1)	Form of Noncompetition, Nondisclosure and Inventions Agreement between the Registrant and Charles B. Haaser, Lynne Brum, and Sarah P. Cecil.
10.14	†(1)	Form of Indemnification Agreement between the Registrant and its Directors and Officers.
10.15	(1)	Lease Agreement 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.
10.15.1	(9)	Second Amendment to Lease between the Company and 21 Erie Realty Trust dated as of October 25, 2013 for the premises located at 21 Erie Street, Cambridge, Massachusetts 02139.
10.15.2	(16)	Lease Termination Agreement dated January 20, 2016, between the Company and BMR-21 Erie Street LLC
10.16	(16)	Lease Agreement between the Company and ARE-MA Region No. 20, LLC dated January 20, 2016, for the premises located at 19 Presidential Way, Woburn, MA
10.17	(2)	Lease between Fortune Wakefield, LLC and Metabolix, Inc. dated March 30, 2007.
10.17.1	(6)	First Amendment of Lease between Fortune Wakefield, LLC and Metabolix, Inc. dated February 29, 2012.
10.17.2	(9)	Second Amendment of Lease between Fortune Wakefield, LLC and Metabolix, Inc. dated October 24, 2013.
10.18	#(1)	License Agreement between the Company and Tepha, Inc. dated as of October 1, 1999.
10.19	#(1)	License Agreement between the Company and Tepha, Inc. dated as of September 9, 2003.
10.20	(13)	Securities Purchase Agreement dated June 15, 2015 between the Company and the Investors named therein
10.21	(13)	Standstill Agreement dated June 19, 2015 between the Company and Jack W. Schuler, Renate Schuler and the Schuler Family Foundation
10.22	(14)	Common Stock Purchase Agreement, dated October 7, 2015 between Metabolix, Inc. and Aspire Capital Fund, LLC
14.1	(5)	Metabolix, Inc. Code of Business Conduct and Ethics.
21.1	(7)	Subsidiaries of the Registrant.
23.1	*	Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm.
24.1		Power of Attorney (incorporated by reference to the signature page of this Annual Report on Form 10-K).
31.1	*	Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934.
31.2	*	Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934.
32.1	*	Certification Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.1	*	The following financial information from the Metabolix Inc. Annual Report on Form 10-K for the year ended December 31, 2015 formatted in XBRL; (i) Consolidated Balance Sheets, December 31, 2015 and December 31, 2014; (ii) Consolidated Statements of Operations, Years Ended December 31, 2015, 2014 and 2013; (iii) Consolidated Statements of Comprehensive Income (Loss), Years Ended December 31, 2015, 2014 and 2013; (iv) Consolidated Statements of Cash Flows, Years Ended December 31, 2015, 2014 and 2013; and (v) Consolidated Statements of Stockholders' Equity for the Years Ended December 31, 2015, 2014 and 2013; and (vi) Notes to Consolidated Financial Statements.
101.INS	*	XBRL Instance Document.
101.SCH	*	XBRL Taxonomy Extension Schema.

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101.CAL	*	XBRL Taxonomy Extension Calculation Linkbase.
101.DEF	*	XBRL Taxonomy Extension Definition Linkbase.
101.LAB	*	XBRL Taxonomy Extension Label Linkbase.
101.PRE	*	XBRL Taxonomy Extension Presentation Linkbase.

† Indicates a management contract or any compensatory plan, contract or arrangement.

Confidential treatment has been granted for certain portions of this document pursuant to a Commission order. Such provisions have been filed separately with the Commission.

* Filed herewith

- (1) Incorporated by reference herein to the exhibits to the Company's Registration Statement on Form S-1 (File No. 333-135760)
- (2) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2007 (File No. 001-33133)
- (3) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009 (File No. 001-33133)
- (4) Incorporated by reference herein to the exhibits to the Company's 2008 Annual Report on Form 10-K filed March 12, 2009 (File No. 001-33133)
- (5) Incorporated by reference herein to the exhibits to the Company's 2011 Annual Report on Form 10-K filed March 12, 2012 (File No. 001-33133)
- (6) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012 (File No. 001-33133)
- (7) Incorporated by reference herein to the exhibits to the Company's 2012 Annual Report on Form 10-K filed March 28, 2013 (File No. 001-33133)
- (8) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013 (File No. 001-33133)
- (9) Incorporated by reference herein to the exhibits to the Company's 2013 Annual Report on Form 10-K filed March 28, 2014 (File No. 001-33133)
- (10) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014 (File No. 001-33133)
- (11) Incorporated herein by reference herein to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 (File No. 001-33133)
- (12) Incorporated by reference herein to the exhibits to the Company's 2014 Annual Report on Form 10-K filed March 25, 2015 (File No. 001-33133)
- (13) Incorporated by reference herein to the exhibits to the Company's Report on Form 8-K filed on June 17, 2015 (File No. 001-33133)
- (14) Incorporated by reference herein to the exhibits to the Company's Report on Form 8-K filed on October 7, 2015 (File No. 001-33133)
- (15) Incorporated by reference herein to the exhibits to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015 (File No. 001-33133)
- (16) Incorporated by reference herein to the exhibits to the Company's Report on Form 8-K filed on January 26, 2016 (Filed No. 001-33133)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

March 29, 2016

METABOLIX, INC.

By:

/s/ JOSEPH SHAULSON

Joseph Shaulson
President and Chief Executive Officer
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Joseph H. Shaulson, Charles B. Haaser, and Sarah P. Cecil, jointly and severally, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

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Pursuant to the requirements of the Securities Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ JOSEPH SHAULSON</u> Joseph Shaulson	President and Chief Executive Officer and Director (Principal Executive Officer)	March 29, 2016
<u>/s/ CHARLES B. HAASER</u> Charles B. Haaser	Chief Accounting Officer (Principal Accounting Officer)	March 29, 2016
<u>/s/ PETER N. KELLOGG</u> Peter N. Kellogg	Director	March 29, 2016
<u>/s/ CELESTE B. MASTIN</u> Celeste B. Mastin	Director	March 29, 2016
<u>/s/ OLIVER P. PEOPLES</u> Oliver P. Peoples	Director	March 29, 2016
<u>/s/ ANTHONY J. SINSKEY</u> Anthony J. Sinskey, Sc.D.	Director	March 29, 2016
<u>/s/ MATTHEW STROBECK</u> Matthew Strobeck	Director	March 29, 2016
<u>/s/ ROBERT L. VAN NOSTRAND</u> Robert L. Van Nostrand	Director	March 29, 2016

METABOLIX, INC.
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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, comprehensive loss, stockholders' equity and cash flows present fairly, in all material respects, the financial position of Metabolix, Inc. and its subsidiaries at December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015 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.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and has insufficient capital resources, which raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to this matter are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
March 29, 2016

METABOLIX, INC.

CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share amounts)

	December 31, 2015	December 31, 2014
Assets		
Current Assets:		
Cash and cash equivalents	\$ 12,269	\$ 20,046
Accounts receivable	238	45
Due from related parties	146	112
Unbilled receivables	150	420
Inventory	379	586
Prepaid expenses and other current assets	1,668	756
Total current assets	14,850	21,965
Restricted cash	619	619
Property and equipment, net	905	456
Other assets	714	95
Total assets	\$ 17,088	\$ 23,135
Liabilities and Stockholders' Equity		
Current Liabilities:		
Accounts payable	\$ 120	\$ 333
Accrued expenses	3,513	3,709
Deferred revenue	277	147
Total current liabilities	3,910	4,189
Other long-term liabilities	150	150
Total liabilities	4,060	4,339
Commitments and contingencies (Note 8)		
Stockholders' Equity:		
Preferred stock (\$0.01 par value per share); 5,000,000 shares authorized; no shares issued or outstanding	—	—
Common stock (\$0.01 par value per share); 250,000,000 shares authorized at December 31, 2015; 27,331,435 and 22,530,322 shares issued and outstanding at December 31, 2015 and 2014, respectively	273	225
Additional paid-in capital	338,580	320,707
Accumulated other comprehensive loss	(72)	(64)
Accumulated deficit	(325,753)	(302,072)
Total stockholders' equity	13,028	18,796
Total liabilities and stockholders' equity	\$ 17,088	\$ 23,135

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

METABOLIX, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except share and per share amounts)

	Years Ended December 31,		
	2015	2014	2013
Revenue:			
Product revenue	\$ 619	\$ 546	\$ 461
Grant revenue	1,350	1,807	2,480
Research and development revenue	—	—	618
License fee and royalty revenue (Note 9)	625	447	219
Total revenue	2,594	2,800	3,778
Costs and expenses:			
Cost of product revenue	660	1,482	1,908
Research and development	16,572	17,342	18,802
Selling, general, and administrative	9,105	10,805	11,608
Total costs and expenses	26,337	29,629	32,318
Loss from continuing operations	(23,743)	(26,829)	(28,540)
Other income (expense), net:			
Interest income, net	5	7	51
Other income (expense), net	57	54	(55)
Total other income (expense), net	62	61	(4)
Net loss from continuing operations	(23,681)	(26,768)	(28,544)
Discontinued operations			
Loss from discontinued operations	—	(1,878)	(1,962)
Loss from write down of assets held for sale	—	(888)	—
Total loss from discontinued operations	—	(2,766)	(1,962)
Net loss	\$ (23,681)	\$ (29,534)	\$ (30,506)
Basic and Diluted net loss per share:			
Net loss from continuing operations	\$ (0.95)	\$ (2.61)	\$ (4.97)
Net loss from discontinued operations	—	(0.27)	(0.34)
Net loss per share	\$ (0.95)	\$ (2.88)	\$ (5.31)
Number of shares used in per share calculations:			
Basic & Diluted	25,007,351	10,242,477	5,745,183

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

METABOLIX, INC.**CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS****(In thousands)**

	Years Ended December 31,		
	2015	2014	2013
Net loss	\$ (23,681)	\$ (29,534)	\$ (30,506)
Other comprehensive income (loss):			
Change in unrealized (loss) on investments	—	(1)	(12)
Change in foreign currency translation adjustment	(8)	(157)	(38)
Reclassification adjustment for losses included in net loss	—	165	—
Total other comprehensive income (loss)	(8)	7	(50)
Comprehensive loss	<u>\$ (23,689)</u>	<u>\$ (29,527)</u>	<u>\$ (30,556)</u>

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

METABOLIX, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Years Ended December 31,		
	2015	2014	2013
Cash flows from operating activities			
Net loss	\$ (23,681)	\$ (29,534)	\$ (30,506)
Less:			
Loss from discontinued operations	—	(2,766)	(1,962)
Loss from continuing operations	(23,681)	(26,768)	(28,544)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation	265	507	928
Charge for 401(k) company common stock match	323	374	397
Stock-based compensation	2,128	2,276	3,122
Inventory impairment	209	873	746
Gain on sale of property and equipment	(33)	(43)	—
Changes in operating assets and liabilities:			
Accounts receivable	(193)	952	(158)
Due from related parties	(34)	(61)	24
Unbilled receivables	270	(223)	185
Inventory	(2)	462	(516)
Prepaid expenses and other assets	(1,081)	(43)	(21)
Accounts payable	(226)	(246)	(654)
Accrued expenses	62	(1,179)	1,383
Deferred rent and long-term liabilities	—	(50)	(151)
Deferred revenue	130	(522)	(398)
Net cash used by continuing operations for operating activities	(21,863)	(23,691)	(23,657)
Net cash used by discontinued operations for operating activities	—	(845)	(2,991)
Net cash used in operating activities	(21,863)	(24,536)	(26,648)
Cash flows from investing activities			
Purchase of property and equipment	(654)	(172)	(373)
Proceeds from sale of equipment	40	43	—
Change in restricted cash	—	—	(25)
Purchase of investments	—	(1,508)	(16,635)
Proceeds from sale and maturity of short-term investments	—	13,017	36,821
Net cash (used) provided by continuing operations for investing activities	(614)	11,380	19,788
Net cash provided by discontinued operations for investing activities	—	292	—
Net cash (used) provided by investing activities	(614)	11,672	19,788
Cash flows from financing activities			
Proceeds from options exercised	—	300	14
Proceeds from private placement offering, net of issuance costs	14,703	24,914	—
Net cash provided by financing activities	14,703	25,214	14
Effect of exchange rate changes on cash and cash equivalents	(3)	(2)	(28)
Net (decrease) increase in cash and cash equivalents	(7,777)	12,348	(6,874)
Cash and cash equivalents at beginning of period	20,046	7,698	14,572
Cash and cash equivalents at end of period	\$ 12,269	\$ 20,046	\$ 7,698
Supplemental disclosure of non-cash information:			
Preferred stock conversion to common stock	\$ —	\$ 12,500	\$ —
Purchase of property and equipment included in accounts payable and accrued expenses	\$ 68	\$ —	\$ —
Issuance of stock in connection with Aspire agreement	\$ 450	\$ —	\$ —
Restricted stock units issued to settle incentive compensation obligation	\$ 305	\$ —	\$ —

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

METABOLIX, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands, except share amounts)

	Series B		Common Stock		Additional Paid-In Capital	Accumulated other Comprehensive Income (loss)	Accumulated Deficit	Total Stockholders' Equity
	Preferred Stock		Shares	Par Value				
	Shares	Par Value	Shares	Par Value				
Balance, December 31, 2012	—	\$ —	5,717,728	\$ 57	\$ 289,336	\$ (21)	\$ (242,032)	\$ 47,340
Exercise of common stock options	—	—	1,258	—	14	—	—	14
Non-cash stock-based compensation expense	—	—	—	—	3,193	—	—	3,193
Issuance of common stock for 401k match	—	—	44,555	—	407	—	—	407
Change in unrealized loss on investments	—	—	—	—	—	(12)	—	(12)
Effect of foreign currency translation	—	—	—	—	—	(38)	—	(38)
Net income	—	—	—	—	—	—	(30,506)	(30,506)
Balance, December 31, 2013	—	\$ —	5,763,541	\$ 57	\$ 292,950	\$ (71)	\$ (272,538)	\$ 20,398
Exercise of common stock options	—	—	41,667	—	300	—	—	300
Non-cash stock-based compensation expense	—	—	—	—	2,335	—	—	2,335
Issuance of common stock for 401k match	—	—	58,448	1	375	—	—	376
Issuance of stock in connection with private placement, net offering costs of \$86	8,333	—	8,333,333	83	24,831	—	—	24,914
Issuance of common stock upon conversion of preferred stock	(8,333)	—	8,333,333	84	(84)	—	—	—
Change in unrealized loss on investments	—	—	—	—	—	(1)	—	(1)
Effect of foreign currency translation	—	—	—	—	—	8	—	8
Net loss	—	—	—	—	—	—	(29,534)	(29,534)
Balance, December 31, 2014	—	\$ —	22,530,322	\$ 225	\$ 320,707	\$ (64)	\$ (302,072)	\$ 18,796
Non-cash stock-based compensation expense	—	—	—	—	2,128	—	—	2,128
Restricted stock units issued to settle incentive compensation obligation	—	—	—	—	305	—	—	305
Issuance of common stock for 401k match	—	—	131,113	1	334	—	—	335
Issuance of stock in connection with private placement, net offering costs of \$297	—	—	4,370,000	44	14,659	—	—	14,703
Issuance of common stock in connection with Aspire agreement	—	—	300,000	3	447	—	—	450
Effect of foreign currency translation	—	—	—	—	—	(8)	—	(8)
Net loss	—	—	—	—	—	—	(23,681)	(23,681)
Balance, December 31, 2015	—	\$ —	27,331,435	\$ 273	\$ 338,580	\$ (72)	\$ (325,753)	\$ 13,028

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

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except for share and per share amounts)

1. Nature of Business

Metabolix is an advanced biomaterials company focused on delivering sustainable solutions to the plastics industry. The Company has core capabilities in microbial genetics, fermentation process engineering, chemical engineering, polymer science, plant genetics and botanical science, and it has assembled these capabilities in a way that has allowed it to integrate its biotechnology research with real world chemical engineering and industrial practice. In addition, the Company has created an extensive intellectual property portfolio to protect its innovations which, together with its technology, serves as a valuable foundation for its business and future industry collaborations. The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, the need to obtain additional funding, development by the Company's competitors of new technological innovations, protection of proprietary technology, and compliance with government regulations.

The accompanying consolidated financial statements have been prepared on a basis which assumes that the Company will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitments in the normal course of business. However, with the exception of 2012, when the Company recognized \$38,885 of deferred revenue from the terminated Telles joint venture, it has recorded losses since its inception, including its fiscal year ended December 31, 2015. As of December 31, 2015, the Company held unrestricted cash and cash equivalents of \$12,269. The Company continues to face significant challenges and uncertainties and, as a result, its available capital resources may be consumed more rapidly than currently expected due to (a) lower than expected sales of its biopolymer products as a result of slow market adoption; (b) increases in capital costs and operating expenses related to the expansion of pilot manufacturing or the establishment and start-up of commercial manufacturing either on its own or with third parties; (c) changes the Company may make to the business that affect ongoing operating expenses; (d) changes the Company may make to its business strategy; (e) changes in the Company's research and development spending plans; (f) higher than expected costs in connection with the relocation of its Massachusetts facilities, and (g) other items affecting the Company's forecasted level of expenditures and use of cash resources. The Company's present capital resources are not sufficient to fund its planned operations for a twelve month period, and therefore, raise substantial doubt about its ability to continue as a going concern.

The Company was successful during its fiscal quarters ending June 30, 2015 and September 30, 2014, in raising \$14,703 and \$24,914, net of offering costs, respectively, through private equity offerings. On October 7, 2015, the Company entered into a \$20,000 common stock purchase agreement with Aspire Capital Fund, LLC ("Aspire"). Under terms of the agreement, Aspire has committed to purchase up to \$20,000 of Metabolix's common stock over a 30 month period that began on November 9, 2015, the date on which the conditions to the commencement of common stock purchases under the agreement were satisfied. Common stock may be sold from time to time at the Company's option under pricing formulas based on prevailing market prices around the time of each sale. The purchase agreement contains limitations on the number of shares that the Company may sell to Aspire. Additionally, the Company and Aspire may not effect any sales of shares of our common stock under the purchase agreement during the continuance of an event of default or on any trading day that the closing sale price of its common stock is less than \$0.50 per share. At December 31, 2015, the full \$20,000 remained available under the purchase agreement with Aspire. Even if the Company sells shares under the Aspire agreement, the Company will require additional funding during the next twelve months to continue its operations and support its capital needs. The timing, structure and vehicles for obtaining future financing are under consideration, but there can be no assurance that such financing efforts will be successful. The current economic environment and recent uncertainty and volatility in financial markets may make it difficult to obtain additional financing. The Company intends to use the proceeds of its recent and any future financings for general corporate purposes and working capital requirements, including the continued development of its specialty biopolymers business as the foundation for its longer range commercial scale plans and the future growth of its business.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except for share and per share amounts)

If the Company issues equity or debt securities to raise additional funds, (i) the Company may incur fees associated with such issuance, (ii) its existing stockholders may experience dilution from the issuance of new equity securities, (iii) the Company may incur ongoing interest expense and be required to grant a security interest in Company assets in connection with any debt issuance, and (iv) the new equity or debt securities may have rights, preferences and privileges senior to those of the Company's existing stockholders. In addition, utilization of the Company's net operating loss and research and development credit carryforwards may be subject to significant annual limitations under Section 382 of the Internal Revenue Code of 1986 due to ownership changes resulting from equity financing transactions. If the Company raises additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish valuable rights to its potential products or proprietary technologies, or grant licenses on terms that are not favorable to the Company.

Failure to receive additional funding during the next twelve months may force the Company to delay, scale back or otherwise modify its business and manufacturing plans, sales and marketing efforts, research and development activities and other operations, and/or seek strategic alternatives. The consolidated financial statements do not include any adjustments that may result from the outcome of these uncertainties.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The Company's consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America. The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions were eliminated, including transactions with its Canadian subsidiary, Metabolix Oilseeds, Inc. On October 20, 2014, the Company completed the sale of substantially all of the assets of its German subsidiary, Metabolix GmbH. The consolidated financial statements for each of the two years ending December 31, 2014, have been presented to reflect the operations of Metabolix GmbH, as well as certain European operations conducted by Metabolix, Inc. prior to the formation of Metabolix GmbH, as a discontinued operation.

Reverse Stock Split

On May 26, 2015, the Company effected a 1-for-6 reverse stock split of its common stock. Unless otherwise indicated, all share amounts, per share data, share prices, exercise prices, and conversion rates set forth in these notes and the accompanying financial statements have, where applicable, been adjusted retroactively to reflect this reverse stock split.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") 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.

Investments

The Company considers all investments purchased with an original maturity date of ninety days or more at the date of purchase and a maturity date of one year or less at the balance sheet date to be short-term investments. All other investments are classified as long-term. The Company held no short or long-term investments at December 31, 2015 or December 31, 2014.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except for share and per share amounts)

Unrealized gains and temporary losses on investments are included in accumulated other comprehensive income (loss) as a separate component of stockholders' equity. Realized gains and losses, dividends, interest income and declines in value judged to be other-than-temporary credit losses are included in other income (expense). Any premium or discount arising at purchase is amortized and/or accreted to interest income.

Restricted Cash

The Company had restricted cash in the amount of \$619 at both December 31, 2015 and December 31, 2014. Restricted cash consisted of \$494 held in connection with the lease agreement for the Company's Cambridge, Massachusetts facility and \$125 held in connection with the Company's corporate credit card programs. On January 20, 2016, Metabolix entered into a new facility lease for approximately 30,000 square feet of office and research and development space at 19 Presidential Way, Woburn, Massachusetts. The terms of this new lease required the Company to increase its restricted cash by setting aside an additional \$307 of cash as a security deposit through an irrevocable letter of credit. Concurrent with the new lease, the Company signed a lease termination agreement with the landlord of the Cambridge facility. The Company expects that the \$494 in restricted cash held in connection with that lease will be released during the third quarter of 2016.

Foreign Currency Translation

Foreign denominated assets and liabilities of the Company's wholly-owned foreign subsidiaries are translated into U.S. dollars at the prevailing exchange rates in effect on the balance sheet date. Revenues and expenses are translated at average exchange rates prevailing during the period. Any resulting translation gains or losses are recorded in accumulated other comprehensive income (loss) in the consolidated balance sheet. When the Company dissolves, sells or substantially sells all of the assets of a consolidated foreign subsidiary, the cumulative translation gain or loss of that subsidiary is released from comprehensive income (loss) and included within its consolidated statement of operations during the fiscal period when the dissolution or sale occurs.

Comprehensive Income (Loss)

Comprehensive income (loss) is comprised of net income (loss) and certain changes in stockholders' equity that are excluded from net income (loss). The Company includes unrealized gains and losses on marketable securities and foreign currency translation adjustments in other comprehensive income (loss).

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk primarily consist of cash and cash equivalents, short-term investments and accounts receivable. The Company has historically invested its cash equivalents in highly rated money market funds, corporate debt, federal agency notes and U.S. treasury notes. Investments are acquired in accordance with the Company's investment policy which establishes a concentration limit per issuer. At December 31, 2015, the Company's cash equivalents were invested solely in money market funds.

The Company provides credit to customers in the normal course of business. The Company performs ongoing credit evaluations of its customers' financial condition and limits the amount of credit extended when deemed necessary. At December 31, 2015, the Company's worldwide accounts and unbilled receivables include \$156 or 29% primarily from U.S. government grants and \$231 or 43% from customer product sales. At December 31, 2015, the Company's REFABB grant with the Department of Energy represented 43% of billed and unbilled receivables from government grants. At December 31, 2015, three customers represented 92% of accounts receivable due from product sales. At December 31, 2014, the Company's worldwide accounts and unbilled receivables included \$429 or 74% from government grants and \$37 or 6% from customer product sales.

METABOLIX, INC.**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(In thousands, except for share and per share amounts)****Fair Value Measurements**

The carrying amounts of the Company's financial instruments as of December 31, 2015 and 2014, which include cash equivalents, accounts receivable, unbilled receivables, receivables due from related parties, accounts payable, and accrued expenses, approximate their fair values due to the short-term nature of these instruments. See Note 5 for further discussion on fair value measurements.

Segment Information

The accounting guidance for segment reporting establishes standards for reporting information on operating segments in annual financial statements. The Company operates in one segment, which is the business of developing and commercializing technologies for the production of polymers and chemicals in microbes and plants. The Company's chief operating decision-maker does not manage any part of the Company separately, and the allocation of resources and assessment of performance are based on the Company's consolidated operating results. As of December 31, 2015, 2014 and 2013, less than 10% of the Company's combined total assets were located outside of the United States. In addition, the reported net income (loss) outside of the United States was less than 10% of the combined net income (loss) of the consolidated Company.

Inventory

The Company's adopted inventory policies are to state inventory at the lower of cost or market and to value inventory using the average cost method. The Company analyzes its inventory levels quarterly and writes down, to cost of product revenue, inventory it considers to be in excess of expected sales requirements, fails to meet commercial sales specifications or that has become obsolete.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Repairs and maintenance are charged to operations as incurred. Depreciation is computed using the straight-line method over the estimated useful lives of the assets once they are placed in service as follows:

<u>Asset Description</u>	<u>Estimated Useful Life</u>
Equipment	2.5 - 3 years
Furniture and Fixtures	5
Software	3
Leasehold improvements	Shorter of useful life or term of lease

The Company records incentive payments received from its landlords as deferred rent and amortizes these amounts as reductions to lease expense over the lease term.

Impairment of Long-Lived Assets

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The guidance further requires that companies 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 measure an impairment loss as the difference between the carrying amount and fair value of the asset.

METABOLIX, INC.**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS****(In thousands, except for share and per share amounts)****Revenue Recognition**

Principal sources of revenue are government research grants, product sales, license fees, royalty revenues and research and development payments that are primarily derived from collaborative agreements with other companies.

The Company's policy is to recognize product revenue when evidence of an arrangement exists, title has passed or services have been rendered, the selling price is fixed or determinable and payment by the customer is reasonably assured. Revenue from product sales to customers is recognized when all elements of the sale have been delivered. The Company's product return policy provides for discretion in accepting customer product returns during a period of sixty days after product delivery. Until sufficient experience is developed on which to base an estimate of product returns, the Company defers recognition of product revenue and related costs until the later of (i) the end of the sixty day period or (ii) when the customer payment has been received. The Company includes deferred cost of product revenue in inventory. As of December 31, 2015 and December 31, 2014, the Company's deferred product revenue and associated cost of product revenue are shown below:

	Year Ended December 31,	
	2015	2014
Deferred product revenue	\$ 236	\$ 57
Deferred cost of product revenue	\$ 51	\$ 9

Fees to license the Company's proprietary and licensed technologies 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 collection is reasonably assured; otherwise the Company recognizes royalty revenue upon receipt of payment.

The Company follows authoritative guidance on revenue recognition for multiple-element arrangements. Under this guidance, the fair value of deliverables under an arrangement may be derived using a "best estimate of selling price" if vendor-specific objective evidence and third party evidence is not available. Deliverables under the arrangement will be separate units of accounting, provided (i) a delivered item has value to the customer on a standalone basis; and (ii) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item is considered probable and substantially within the Company's control.

The Company recognizes funds received from contractual research and development services and from government grants as revenue. These contracts and grants are considered an ongoing major and central operation of the Company's business. For government grants, revenue is earned as research expenses related to the grants are incurred.

Research and Development

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, product trials, facility related expenses, depreciation, and stock-based compensation. Costs related to revenue-producing contracts and government grants are recorded as research and development expenses.

Selling, General, and Administrative Expenses

The Company's selling, general and administrative expense includes costs for salaries, employee benefits, facilities expenses, consulting fees, travel expenses, depreciation expenses, and office related expenses incurred to support the selling and administrative operations of the Company.

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except for share and per share amounts)

Intellectual Property Costs

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

Stock-Based Compensation

All share-based payments to employees and members of the Board of Directors are recognized in the statement of operations based on their fair values. Compensation cost is based on the grant-date fair value of the award, adjusted for estimated forfeitures, and is recognized on a straight-line basis over the period during which the recipient is required to provide service in exchange for the award. See Note 12 for a description of the types of stock-based awards granted, the compensation expense related to such awards and detail of equity-based awards outstanding.

Basic and Diluted Net Loss per Share

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of common shares outstanding. Diluted net loss per share is computed by dividing net income by the weighted-average number of dilutive common shares outstanding during the period. Diluted shares outstanding is calculated by adding to the weighted shares outstanding any potential (unissued) shares of common stock from outstanding stock options and warrants based on the treasury stock method, as well as weighted shares outstanding of any potential (unissued) shares of common stock from restricted stock units. In periods when a net loss is reported, all common stock equivalents are excluded from the calculation because they would have an anti-dilutive effect, meaning the loss per share would be reduced. Therefore, in periods when a loss is reported, there is no difference in basic and dilutive loss per share. Common stock equivalents include stock options, restricted stock awards and warrants.

The Company follows the two-class method when computing net loss per share, when it has issued shares that meet the definition of participating securities. The two-class method determines net loss per share for each class of common and participating securities according to dividends declared or accumulated and participating rights in undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common and participating securities based on their respective rights to receive dividends, as if all income for the period has been distributed or losses to be allocated if they are contractually required to fund losses. There were no amounts allocated to participating securities during each of the three years ended December 31, 2015, as the Company was in a loss position and had no shares that met the definition of participating securities outstanding at December 31, 2015, 2014 and 2013.

On May 26, 2015, the Company effected a 1-for-6 reverse stock split of its common stock. The calculation of basic and diluted net loss per share, as presented in the accompanying Consolidated Statements of Operations, have been determined based on retroactive adjustment of weighted average shares outstanding for all periods presented.

The number of shares of potentially dilutive common stock presented on a weighted average basis, related to options, restricted stock units and warrants (prior to consideration of the treasury stock method) that were excluded from the calculation of dilutive shares since the inclusion of such shares would be anti-dilutive for the three years ended December 31, 2015, 2014 and 2013, respectively, are shown below:

	Year Ended December 31,		
	2015	2014	2013
Options	943,197	1,196,389	998,873
Restricted stock awards	946,074	99,726	—
Warrants	2,144,293	—	681
Total	4,033,564	1,296,115	999,554

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Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the consolidated financial statements or in the Company's 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. See Note 13 for further discussion of income taxes. The Company had no amounts recorded for any unrecognized tax benefits as of December 31, 2015 and 2014.

The Company accounts for uncertain tax positions using a "more-likely-than-not" threshold for recognizing and resolving uncertain tax positions. The evaluation of uncertain tax positions is based on factors that include, but are not limited to, changes in tax law, the measurement of tax positions taken or expected to be taken in tax returns, the effective settlement of matters subject to audit, new audit activity and changes in facts or circumstances related to a tax position. The provision for income taxes includes the effects of any resulting tax reserves or unrecognized tax benefits that are considered appropriate as well as the related net interest and penalties, if any. The Company evaluates uncertain tax positions on a quarterly basis and adjusts the level of the liability to reflect any subsequent changes in the relevant facts surrounding the uncertain positions.

Recent Accounting Standards Changes

In February 2016, the FASB issued ASU 2016-02, *Leases* (Topic 842), which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e. lessees and lessors). The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases today. ASC 842 supersedes the previous leases standard, ASC 840 Leases. The standard is effective on January 1, 2019, with early adoption permitted. The Company is in the process of evaluating the impact of this new guidance.

In November 2015, the FASB issued Accounting Standards Update No. 2015-17, *Balance Sheet Classification of Deferred Taxes* (ASU 2015-17). ASU 2015-17 requires that deferred income tax liabilities and assets be classified as noncurrent in the Company's balance sheet. The standard is effective for public entities for annual and interim periods beginning after December 15, 2016, with early adoption permitted. ASU 2015-17 has been adopted on a prospective basis for the year ended December 31, 2015, however, the Company has no deferred tax liabilities requiring reclassification on that date. The Company's balance sheet at December 31, 2014 was not retrospectively adjusted. The adoption of this guidance had no impact on the Company's results of operations or cash flows.

In July 2015, the FASB issued ASU No. 2015-11, *Simplifying the Measurement of Inventory*, which requires entities to measure most inventory "at the lower of cost and net realizable value," thereby simplifying the current guidance under which an entity must measure inventory at the lower of cost or market. ASU 2015-11 is effective for annual and interim periods beginning after December 15, 2016, with early adoption permitted. The Company is currently reviewing the potential impact of adopting the new guidance.

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In August 2014, the FASB issued ASU 2014-15, *Presentation of Financial Statements-Going Concern (Subtopic 205-40)*. The new guidance addresses management's responsibility to evaluate whether there is substantial doubt about an entity's ability to continue as a going concern for one year after the date that the financial statements are issued and to provide related footnote disclosures. Management's evaluation should be based on relevant conditions and events that are known and reasonably knowable at the date that the financial statements are issued. This guidance should reduce diversity in the timing and content of footnote disclosures. The amendment in this update apply to all entities and are effective for the annual period ending after December 15, 2016, and for annual periods and interim periods thereafter. Early application is permitted. The Company is currently reviewing the potential impact of adopting the new guidance on its current disclosures.

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. It also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. In August 2015, the FASB issued ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which delayed the effective date of the new standard from January 1, 2017 to January 1, 2018. The FASB also agreed to allow entities to choose to adopt the standard as of the original effective date. The Company is currently evaluating the method of adoption and potential impact that Topic 606 may have on its financial position and results of operations.

In April 2014, the FASB issued ASU No. 2014-08, *Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity*, which changes the criteria for determining which disposals can be presented as discontinued operations and modifies the related disclosure requirements. Under the new guidance, a disposal of a component of an entity or a group of components of an entity is required to be reported in discontinued operations if the disposal represents a strategic shift that has (or will have) a major effect on an entity's operations and financial results and is disposed of or classified as held for sale. The standard also introduces several new disclosures. The guidance applies prospectively to new disposals and new classifications of disposal groups as held for sale after the effective date. ASU 2014-08 is effective for annual and interim periods beginning after December 15, 2014, with early adoption permitted. The Company has elected early adoption of ASU 2014-08 and has applied the new guidance in connection with its sale of substantially all of the assets and operations of its wholly-owned subsidiary, Metabolix GmbH during 2014. See Note 16, Discontinued Operations.

3. Significant Collaborations

The Company follows the accounting guidance for collaborative arrangements which requires that certain transactions between collaborators be recorded in the income statement on either a gross or net basis, depending on the characteristics of the collaboration relationship, and provides for enhanced disclosure of collaborative relationships. The Company evaluates its collaborative agreements for proper income statement classification based on the nature of the underlying activity.

Metabolix is not currently participating in any collaborative arrangements. The Company's historic strategy for collaborative arrangements has been to retain substantial participation in the future economic value of its technology while receiving current cash payments to offset research and development costs and working capital needs. By their nature, the Company's collaborative agreements have been complex, containing multiple elements covering a variety of present and future activities.

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4. Inventory

The components of biopolymer inventories of the Company's continuing operations are as follows:

	Year Ended December 31,	
	2015	2014
Raw materials	\$ 51	\$ 2
Finished goods	328	584
Total inventory	\$ 379	\$ 586

Included within finished goods at December 31, 2015 and 2014, are \$51 and \$9, respectively, of inventory that the Company has sold and shipped to customers for which the Company has not yet recognized revenue under its product revenue recognition policy. On a quarterly basis, the Company uses consistent methodologies to evaluate inventory for net realizable value, reducing the value of inventory for excess and obsolete inventory based upon certain assumptions made about future customer demand, quality and possible alternative uses. During the years ended December 31, 2015, 2014 and 2013, the Company recorded impairment charges to cost of product revenue of \$209, \$873, and \$746, respectively, within continuing operations, for raw material and finished goods inventory that it determined was unlikely to be sold. The Company also recorded an impairment charge of \$888 during its fiscal year ended December 31, 2014 related to the discontinuation of its German operations.

5. Fair Value Measurements

The Company has certain financial assets recorded at fair value which have been classified as Level 1 within the fair value hierarchy as described in the accounting standards for fair value measurements. Fair value is the price that would be received from the sale of an asset or the price paid to transfer a liability in an orderly transaction between independent market participants at the measurement date. Fair values determined by Level 1 inputs utilize observable data such as quoted prices in active markets for identical instruments. Fair values determined by Level 2 inputs utilize data points other than quoted prices in active markets that are observable either directly or indirectly. Fair values determined by Level 3 inputs utilize unobservable data points in which there is little or no market data, which require the reporting entity to develop its own assumptions. The fair value hierarchy level is determined by the lowest level of significant input. At December 31, 2015 and 2014, the Company did not own any Level 2 or Level 3 financial assets or liabilities and there were no transfers of financial assets or liabilities between category levels for the years ended December 31, 2014 and December 31, 2015.

The Company's assets are measured at fair value on a recurring basis. The balance of Level 1 assets as of December 31, 2015 and December 31, 2014 were \$12,269 and \$19,011, respectively, and for both years the assets were in money market funds classified in cash and cash equivalents.

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6. Property and Equipment, Net

Property and equipment consist of the following:

	Year ended December 31,	
	2015	2014
Equipment	\$ 5,055	\$ 4,723
Furniture and fixtures	220	227
Leasehold improvements	1,593	1,356
Software	386	381
Total property and equipment, at cost	7,254	6,687
Less: Accumulated depreciation	(6,349)	(6,231)
Property and equipment, net	\$ 905	\$ 456

Depreciation expense for the years ended December 31, 2015, 2014, and 2013 was \$265, \$507 and \$928 respectively.

7. Accrued Expenses

Accrued expenses consist of the following:

	Year ended December 31,	
	2015	2014
Employee compensation and benefits	\$ 2,114	\$ 2,621
Commercial manufacturing	465	77
Professional services	431	564
Other	503	447
Total accrued expenses	\$ 3,513	\$ 3,709

8. Commitments and Contingencies**Leases**

The Company rents its facilities under operating leases, which expire at various dates through December 2026. Rent expense under operating leases for the years ended December 31, 2015, 2014 and 2013 was \$2,089, \$1,944 and \$1,610, respectively.

At December 31, 2015, the Company's future minimum payments required under operating leases are as follows:

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<u>Year ended December 31,</u>	<u>Minimum lease payment</u>
2016	\$ 1,487
2017	1,454
2018	1,488
2019	1,523
2020	564
2021 and thereafter	—
Total	<u>\$ 6,516</u>

Lease Commitments

On January 20, 2016, the Company entered into an agreement with the landlord of its Cambridge, MA facility to terminate the lease effective July 31, 2016. After giving effect of the termination, the Company's future minimum payments will be reduced by \$502, \$1,223, \$1,252, \$1,280 and \$461 during 2016, 2017, 2018, 2019 and 2020, respectively.

On January 20, 2016, the Company entered into a lease agreement, pursuant to which the Company will lease approximately 30,000 square feet of office and research and development space located at 19 Presidential Way, Woburn, Massachusetts, beginning on June 1, 2016 and ending on December 31, 2026, subject to adjustment depending on the date that renovations of the premises are substantially completed. Annual base rental payments due under the lease will be approximately \$216 during the first lease year, \$725 during the second lease year and \$785 during the third lease year and a total of \$7,346 for the remainder of the lease. The Company provided the landlord with a security deposit in the form of a letter of credit in the amount of \$307. Pursuant to the lease, the Company also will pay certain taxes and operating costs associated with the premises during the term of the lease. The Company will receive up to \$889 from the landlord for tenant improvements to the premises and may elect to receive up to an additional \$444 with certain adjustments in rent.

Contractual Commitments

In connection with the Company's plans to increase biopolymer production capacity, during May 2015, the Company entered into agreements with a U.S. supplier of toll fermentation services and with the owner/operator of its expanded pilot recovery facility. Under the fermentation services agreement, the Company is obligated to pay fixed toll fermentation service fees of approximately \$600 per quarter from February 2016 until July 2017. During May 2015, the Company prepaid \$1,000 for these future fermentation services which is included in prepaid expenses and other current assets in the Company's balance sheet at December 31, 2015. The Company is currently paying contractual fixed fees of approximately \$520 per quarter for the resin recovery facility that will continue until at least December 31, 2016. In addition to the fixed charges under these agreements, the Company is obligated to pay certain variable production costs as incurred. The fixed portion of the manufacturing service fees is included within our minimum payment obligation table shown below.

<u>Year ended December 31,</u>	<u>Minimum Purchase Obligation</u>
2016	\$ 3,272
2017	1,400
2018	—
2019	—
2020 and thereafter	—
Total	<u>\$ 4,672</u>

Litigation

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From time to time, the Company may be subject to legal proceedings and claims in the ordinary course of business. The Company is not currently aware of any such proceedings or claims that it believes will have, individually or in the aggregate, a material adverse effect on the business, financial condition or the results of operations.

Guarantees

As of December 31, 2015 and 2014, the Company did not have significant liabilities recorded for guarantees.

The Company enters into indemnification provisions under various agreements with other companies in the ordinary course of business, typically with business partners, contractors, and customers. Under these provisions, the Company generally indemnifies and holds harmless the indemnified party for losses suffered or incurred by the indemnified party as a result of its activities. These indemnification provisions generally survive termination of the underlying agreement. The maximum potential amount of future payments the Company could be required to make under these indemnification provisions is unlimited. However, to date Metabolix has not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions. As a result, the estimated fair value of these agreements is minimal. Accordingly, the Company has no liabilities recorded for these agreements as of December 31, 2015 and 2014.

9. Related Party Transactions

Tepha Inc.

During 1999 and 2003, the Company entered into sublicense agreements with Tepha Inc. ("Tepha"), to sublicense technology to Tepha. Two of the Company's directors, Matthew Strobeck and Anthony J. Sinsky, serve on the Board of Directors of Tepha. Under the agreements, the Company receives royalties on net sales of licensed products and sublicensing revenues received by Tepha, subject to a minimum payment each year.

The Company recognized license and royalty revenues of \$578, \$425 and \$149 from Tepha for the years ended December 31, 2015, 2014, and 2013, respectively. The Company had outstanding royalty receivable balances of \$146 and \$112 at December 31, 2015 and 2014, respectively.

10. Preferred Stock

The Company's certificate of incorporation, as amended and restated, authorizes it to issue up to 5,000,000 shares of \$0.01 par value preferred stock. As of December 31, 2015 and 2014, no preferred stock was issued or outstanding.

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11. Capital Stock

Common and Preferred Stock Issuances

On October 7, 2015, the Company entered into a common stock purchase agreement with Aspire Capital. Under terms of the agreement, Aspire committed to purchase up to an aggregate of \$20,000 of the Company's common stock over a 30 month period that began on November 9, 2015. Common stock may be sold from time to time at the Company's direction under pricing formulas based on prevailing market prices around the time of each sale. The purchase agreement contains limitations on the number of shares that the Company may sell to Aspire. Additionally, the Company and Aspire may not effect any sales of shares of the Company's common stock under the purchase agreement during the continuance of an event of default or on any trading day that the closing sale price of its common stock is less than \$0.50 per share. Upon execution of the purchase agreement, the Company issued 300,000 shares of its common stock to Aspire with a fair value of \$450, as a commitment fee. In addition, the Company incurred \$169 of additional costs in connection with the Aspire facility, which along with the fair value of the common stock has been recorded as deferred equity costs and is included within other assets in the accompanying consolidated balance sheet at December 31, 2015. These costs will be proratably charged to additional paid-in-capital as shares are sold to Aspire. In the event it is determined no additional shares will be sold under the purchase agreement, any deferred equity offering costs will be expensed at such time. At December 31, 2015, the full \$20,000 under the purchase agreement remains available for sale to Aspire.

On June 19, 2015, the Company completed a private placement of its securities. Proceeds received from the transaction were \$14,703, net of issuance costs of \$297. Investors participating in the transaction purchased a total of 4,370,000 shares of common stock at a price of \$3.32 per share and warrants with a purchase price of \$0.125 per warrant to purchase up to an aggregate of 3,933,000 additional shares of common stock. The warrants have a four-year term and are immediately exercisable at a price of \$3.98 per share. The Company has determined that the warrants should be recorded within equity as additional paid-in capital.

On May 26, 2015, the Company effected a 1-for-6 reverse split of its common stock. The reverse stock split reduced the number of shares of the Company's common stock currently outstanding at the time the reverse split was made effective from approximately 136 million shares to approximately 23 million shares. Proportional adjustments were made to the Company's outstanding stock options and restricted stock units and to the number of shares issued and issuable under the Company's equity compensation plans. The number of authorized shares of the Company's common stock remained at 250 million shares.

On August 22, 2014, the Company completed a private placement of its securities. Proceeds received from the transaction were \$24,914, net of issuance costs of \$86. Investors participating in the transaction purchased a total of 50,000,000 units of the Company's securities at a price of \$0.50 per unit. Each unit consisted of 0.1667 share of the Company's common stock and one one-thousandth of a share of the Company's Series B Convertible Preferred Stock, for a total of 8,333,333 shares of common stock and 50,000 shares of Series B Convertible Preferred Stock. Each share of the preferred stock issued in the transaction was non-voting, was not redeemable, had no liquidation preference and the only conversion rights were that each share was automatically convertible into 166.67 shares of common stock upon the effectiveness of the filing by the Company of a charter amendment to increase the number of shares of authorized common stock to not less than 150,000,000. On October 30, 2014, following stockholder approval of a charter amendment to increase the number of authorized shares of the Company's common stock to 250,000,000 and the effectiveness of such charter amendment, each share of preferred stock issued in the private placement automatically converted into 166.67 shares of common stock, for a total of 8,333,333 additional shares of common stock.

12. Stock-Based Compensation

The Company adopted a stock plan in 2005 (the "2005 Plan"), which 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 November 2006, the 2005 Plan was terminated and the Company adopted a new plan (the "2006 Plan"). No further grants or awards were subsequently made under the 2005 Plan. A total of 269,860 options were awarded from the 2005 Plan, and as of December 31, 2015, 950 of these options remain outstanding and eligible for future exercise and continue to be governed by the terms of the 2005 Plan.

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The 2006 Plan provides for the granting of incentive stock options, nonqualified stock options, stock appreciation rights, deferred stock awards, restricted stock awards, unrestricted stock awards, cash-based awards and dividend equivalent rights. In October 2014, the 2006 Plan was terminated and the Company adopted a new plan (the "2014 Plan"). No further grants or awards were subsequently made under the 2006 Plan. A total of 1,467,076 options have been awarded from the 2006 Plan and as of December 31, 2015, 676,971 of these options remain outstanding and eligible for future exercise.

The 2014 Plan provides for the granting of incentive stock options, nonqualified stock options, stock appreciation rights, deferred stock awards, restricted stock awards, unrestricted stock awards, cash-based awards and dividend equivalent rights. A total of 36,118 options have been awarded from the 2014 Plan and as of December 31, 2015, 34,545 of these options remain outstanding and eligible for future exercise. A total of 1,192,023 restricted stock awards have been awarded from the 2014 Plan and as of December 31, 2015, 1,186,773 of these restricted stock awards are unreleased and remain outstanding.

Expense Information for Employee Stock Awards

The Company recognized stock-based compensation expense, related to employee stock awards, including awards to members of the Board of Directors, of \$2,128, \$2,276 and \$3,122 for the years ended December 31, 2015, 2014 and 2013, respectively. At December 31, 2015, there was approximately \$3,488 of pre-tax stock-based compensation expense, net of estimated forfeitures, related to unvested awards not yet recognized which is expected to be recognized over a weighted average period of 2.00 years.

Stock Options

Options granted under the 2005 Plan, the 2006 Plan and the 2014 Plan (the "Plans") generally vest ratably over periods of one to four years from the date of hire for new employees, or date of award for existing employees, or date of commencement of services with the Company for nonemployees, and generally expire ten years from the date of issuance. The Company's policy is to issue new shares upon the exercise of stock options.

The Company's Board of Directors granted on December 19, 2013, a stock option for the purchase of 191,667 shares of common stock to Joseph Shaulson in connection with his agreement to serve as a member of the Company's Board on that date and as an inducement for him to accept employment with the Company as its President and Chief Executive Officer starting in January 2014. This option was not granted under any of the Plans. The option has an exercise price equal to the fair market value of the Company's common stock at the date of grant, and it has a four-year vesting schedule in which 25%, 25% and 50% of the option vests on the 2nd, 3rd and 4th anniversary dates, respectively, of Mr. Shaulson commencing employment. The Company assessed the terms of this award and determined there was no possibility that it would have to settle this award in cash and, therefore, equity accounting was applied.

A summary of the activity related to the shares of common stock covered by outstanding options is as follows:

	Number of Shares	Weighted Average Exercise Price	Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Balance at December 31, 2014	1,110,721	\$28.22		
Granted	33,318	3.62		
Exercised	—	—		
Forfeited	(4,733)	7.65		
Expired	(235,173)	31.44		
Balance at December 31, 2015	904,133	26.58	6.30	\$—
Vested and expected to vest at December 31, 2015	873,871	27.24	6.22	—
Exercisable at December 31, 2015	611,354	35.50	5.50	—

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The weighted average grant date fair value per share of options granted during fiscal years 2015, 2014, and 2013 was \$2.61, \$4.97 and \$6.86, respectively. The total intrinsic value of options exercised was \$0, \$50 and \$2 for the years ended December 31, 2015, 2014 and 2013, respectively. The weighted average remaining contractual term for options outstanding as of December 31, 2015 was 6.3 years.

For the years ended December 31, 2015, 2014 and 2013, the Company determined the fair value of stock options using the Black-Scholes option pricing model with the following assumptions for option grants, respectively:

	Year Ended December 31,		
	2015	2014	2013
Expected dividend yield	—	—	—
Risk-free rate	1.32% - 1.69%	0.01% - 2.41%	0.71% - 2.05%
Expected option term (in years)	5.5-5.9	0.1-6.1	6.0 - 6.1
Volatility	88% - 91%	84% - 85%	84% - 85%

The Company determined its volatility assumption based on actual market price fluctuations experienced during its trading history. 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 term similar to the expected life of the related option. The expected term of the options is based upon evaluation of historical and expected future exercise behavior.

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. The accounting standard for stock-based compensation 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 and actual forfeitures for the year. The Company will continue to evaluate its forfeiture rate as compared to the actual number of forfeitures in future periods to determine if adjustments to compensation expense may be required.

Restricted Stock Units

On January 2, 2014, the Company awarded 100,000 restricted stock units ("RSUs") to its Chief Executive Officer. These restricted stock units contain both market and performance conditions which are based on the achievement of certain stock price and revenue targets, respectively. The restricted stock units vest in various percentages over three years (subject to certain accelerated and continued vesting events) once the agreed-upon stock price and/or revenue based targets are achieved. Neither the market nor performance conditions were met by January 2, 2016 resulting in the restricted stock units being forfeited as of that date.

The Company estimated the fair value and derived service period of the awards using a Monte Carlo valuation model. The fair value of the award is \$327. The Company is recognizing compensation expense for this award over its requisite service period, which is equal to the cumulative time expected to achieve one of the triggering conditions followed by a three year post-triggering event vesting period. In accordance with accounting guidance for stock options, the amortization of these restricted stock units will continue through March 2018, despite their forfeiture in January 2016.

During 2015, the Company initiated use of RSUs as a broad-based form of long-term compensation incentive for its officers, directors and employees. On April 1, 2015, the Company awarded 203,967 RSUs under the 2014 Plan to members of senior management pursuant to elections previously made by the senior managers to convert a portion of their 2014 performance bonuses from cash to equity. These RSUs vest one year from the date of grant, subject to service conditions. During the year ended December 31, 2015, the Company also awarded a total of 906,806 additional long-term incentive RSUs to senior management and employees. These RSUs vest in four equal annual installments beginning one year after the

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date of grant, subject to service conditions. On September 10, 2015, the Company awarded 81,250 RSUs to its non-employee directors. These RSUs will vest on May 28, 2016.

The Company records stock compensation expense for RSUs on a straight line basis over their vesting period based on each RSU's award date market value. The Company recognizes compensation expense for only the portion of awards that are expected to vest. Therefore, the Company has estimated expected forfeitures of RSU's for the awards valued. In developing a forfeiture rate estimate, the Company considered its historical experience and actual forfeitures for the year. The Company will continue to evaluate its forfeiture rate as compared to the actual number of forfeitures in future periods to determine if adjustments to compensation expense may be required.

The Company will pay required minimum income tax withholding associated with RSUs for its employees. As the RSUs vest, the Company will withhold a number of shares with an aggregate fair market value equal to the minimum tax withholding amount (unless the employee makes other arrangements for payment of the tax withholding) from the common stock issuable at the vest date.

A summary of RSU activity for the twelve months ended December 31, 2015 is as follows:

	Number of RSUs	Weighted Average Remaining Contractual Life (years)
Outstanding at December 31, 2014	100,000	
Awarded	1,192,023	
Released	—	
Forfeited	(5,250)	
Outstanding at December 31, 2015	<u>1,286,773</u>	1.40
Vested and expected to vest as of December 31, 2015	1,145,325	1.17
Weighted average remaining recognition period	2.54	
Weighted average grant date fair value of RSUs granted during the twelve months ended December 31, 2015	\$ 3.61	

13. Income Taxes

The components of loss from continuing operations before provision for income taxes consist of the following:

	Year Ended December 31,		
	2015	2014	2013
Domestic	\$ (23,647)	\$ (28,741)	\$ (28,200)
Foreign	21	35	51
Loss before taxes	<u>\$ (23,626)</u>	<u>\$ (28,706)</u>	<u>\$ (28,149)</u>

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 assets are as follows:

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	Year Ended December 31,	
	2015	2014
Deferred Tax Assets:		
Net operating loss carryforward	\$ 9,904	\$ 6,215
Capitalization of research and development expense	15,070	10,250
Credit carryforwards	1,312	524
Depreciation	2,148	2,017
Non-Qualified Stock Options	4,668	4,484
Other temporary differences	1,420	1,559
Total deferred tax assets.	\$ 34,522	\$ 25,049
Valuation allowance	(34,522)	(25,046)
Net deferred tax assets	—	3
Deferred Tax Liabilities:		
Other temporary differences	—	(3)
Net deferred taxes	\$ —	\$ —

The items accounting for the difference between the income tax benefit computed at the federal statutory rate of 34% and the provision for income taxes were as follows:

	Year Ended December 31,		
	2015	2014	2013
Federal income tax at statutory federal rate	34.0 %	34.0 %	34.0 %
State taxes	4.9 %	7.0 %	3.8 %
Permanent differences	(2.9)%	(3.9)%	(2.1)%
Tax credits	3.6 %	3.1 %	2.8 %
State rate change on deferred balances	0.0 %	0.3 %	(0.4)%
Expiration of net operating losses and credits	0.0 %	(7.2)%	(6.3)%
Impact of Ownership Change	1.8 %	(294.9)%	0.0 %
Other	0.2 %	(1.7)%	0.2 %
Change in valuation allowance	(41.6)%	263.3 %	(32.0)%
Total	0.00 %	0.00 %	0.00 %

The tax years 2012 through 2015 remain open to examination by major taxing jurisdictions to which the Company is subject, which are primarily in the U.S. The statute of limitations for net operating losses utilized in future years will remain open beginning in the year of utilization.

The Company's policy is to record estimated interest and penalties related to uncertain tax positions as income tax expense. As of December 31, 2015 and 2014, the Company had no accrued interest or penalties recorded related to uncertain tax positions.

At December 31, 2015, the Company had net operating loss carryforwards (NOLs) for federal, state and international income tax purposes of approximately \$24,359, \$21,550 and \$2,162, respectively. Included in the federal and state net operating loss carryforwards is \$543 deduction related to the exercise of stock options. This amount represents an excess tax benefit which will be realized when it results in a reduction of cash taxes in accordance with ASC 718. The Company's

METABOLIX, INC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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existing federal and state net operating loss carryforwards will begin to expire on various dates through 2035. The Company also had available research and development credits for federal and state income tax purposes of approximately \$688 and \$496, respectively. These federal and state research and development credits will begin to expire in 2034 and 2029, respectively. As of December 31, 2015, the Company also had available investment tax credits for state income tax purposes of \$2, which also begin to expire in 2017. 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 loss and research and development credit carryforwards may be subject to a substantial annual limitation under Section 382 of the Internal Revenue Code of 1986 due to ownership change limitations that have occurred previously or that could occur in the future. These ownership changes may limit the amount of net operating loss and research and development credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. The Company completed an evaluation of its ownership changes through December 31, 2014 and determined that an ownership change occurred on August 22, 2014 in connection with the Company's issuance of Common and Series B Convertible Preferred stock. As a consequence of this ownership change, the Company's NOLs, tax credit carryforwards and other tax deductions allocable to the tax periods preceding the ownership change became subject to limitation under Section 382. Approximately \$219,719, \$5,614 and \$7,268 of the Company's NOLs, tax credit carryforwards and other tax deductions, respectively, became unavailable for future use. The Company has reduced its associated deferred tax assets accordingly. The Company has not yet completed an evaluation of ownership changes through December 31, 2015. To the extent an ownership change occurs in the future, the net operating loss, credit carryforwards and other deferred tax assets may be subject to further limitations.

No additional provision has been made for U.S. income taxes related to the undistributed earnings of the wholly-owned subsidiaries of Metabolix, Inc. or for unrecognized deferred tax liabilities for temporary differences related to investments in subsidiaries as the amounts are not significant. A liability could arise if amounts are distributed by such subsidiaries or if such subsidiaries are ultimately disposed.

14. Employee Benefits

The Company maintains a 401(k) savings plan in which substantially all of its regular U.S. employees are eligible to participate. Participants may contribute up to 60% of their annual compensation to the plan, subject to eligibility requirements and annual IRS limitations. The Company's plan provides for a matching contribution in common stock of up to 4.5% of a participant's total compensation dependent upon the level of participant contributions made during the plan year. Pursuant to this plan, the Company issued 131,113, 58,448 and 44,555 shares of common stock during the years ended December 31, 2015, 2014 and 2013, respectively, and recorded \$323, \$374 and \$397, respectively, of related expense. Company contributions are fully vested upon issuance.

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15. U.S. Department of Energy Grants

In 2011, the Company entered into a multi-year \$6.0 million grant agreement entitled, *Renewable Enhanced Feedstocks for Advanced Biofuels and Bioproducts*, with the U.S. Department of Energy for the development of switchgrass. The Company is using the funds to perform research to enhance the yield of bio-based products, biopower, or fuels made from switchgrass to produce denser biomass and other products that can be further processed to make fuels such as butanol, chemicals such as propylene, and other materials to improve the economic competitiveness of future biorefineries. Continued receipt of grant proceeds is contingent upon the availability of government appropriated funds and the Company's ability to make substantial progress towards meeting the objectives of the award. The Company recognizes revenue from the grant over the term of the agreement as it incurs related research and development costs and provided it meets its prorated cost-sharing obligation of approximately \$3.9 million. The Company may elect to retain rights to inventions it conceives or reduces to practice in the performance of work under the award, subject to certain rights of the U.S. Government.

During the years ended December 31, 2015, 2014 and 2013, the Company recognized \$1,028, \$1,240 and \$1,640 in revenue related to this grant, respectively. The grant reached its conclusion and the Company fulfilled its contractual obligations in February 2016.

In 2015, the Company entered into a multi-year \$2.0 million grant agreement entitled, *Production of High Oil, Transgene Free Camelina Sativa Plants through Genome Editing*, with the U.S. Department of Energy for the development of Camelina sativa feedstock. The Company is using the funds to perform research to increase oil content and/or seed yield to maximize oil yields per acre. Continued receipt of grant proceeds is contingent upon the availability of government appropriated funds and the Company's ability to make substantial progress towards meeting the objectives of the award. The Company recognizes revenue from the grant over the term of the agreement as it incurs related research and development costs and provided it meets its prorated cost-sharing obligation of approximately \$0.5 million. The Company may elect to retain rights to inventions it conceives or reduces to practice in the performance of work under the award, subject to certain rights of the U.S. Government.

During the year ended December 31, 2015, the Company recognized \$33 in revenue related to this grant. The grant is expected to complete in September 2017.

16. Discontinued Operation

In 2014 the Company completed a comprehensive review of its business and decided to focus its resources on commercializing PHA performance polymers. In connection with this more focused strategy the Company decided to discontinue its operations in Germany. Based on this strategic shift, in October 2014 the Company sold substantially all of the assets of its wholly-owned German subsidiary, Metabolix GmbH, to a German manufacturer of engineering plastics compounds for \$292. The buyer acquired the Mvera™ B5010 and B5011 products for compostable film, as well as certain inventory, certain contracts, and the Mvera™ trademark. The buyer also took over the Metabolix GmbH employees and office space. The Company will not have significant involvement in the operations formerly conducted by Metabolix GmbH.

As of December 31, 2014, the assets of Metabolix GmbH had been sold and its operations had ceased. The consolidated financial statements for each of the two years ending December 31, 2014, have been presented to reflect the operations of Metabolix GmbH as a discontinued operation.

METABOLIX, INC.

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The following represents the major items comprising loss from discontinued operations for the years ended December 31, 2014 and 2013.

	Year Ended December 31,	
	2014	2013
Total revenue	\$ 1,699	\$ 1,616
Costs and expenses:		
Cost of product revenue	1,559	1,118
Research and development	260	325
Selling, general and administrative	1,593	2,135
Loss from write-down of assets held for sale	888	—
Other expense	165	—
Total costs and expenses	4,465	3,578
Net loss	\$ (2,766)	\$ (1,962)

The Company released \$165 of cumulative translation adjustment for its discontinued operations in Germany to loss from discontinued operations in its statement of operations for the year ended December 31, 2014.

17. Restructuring

In October 2014, the Company initiated a restructuring of its U.S. organization to reflect a more narrow strategic focus on PHA performance biopolymers and to modify staffing to the level the Company believed necessary to support successful implementation of its current business strategy. The scope of the restructuring also reflected the Company's decision, consistent with its current business strategy, to suspend work in its chemicals program. The Company recognized a total of \$624 of restructuring charges during 2014 related to post-employment termination benefits in accordance with ASC 420-10, *Exit or Disposal Cost Obligations*. During the year ended December 31, 2015, a \$32 adjustment to increase the restructuring charges was recorded and paid. There were no remaining balances accrued for restructuring charges at December 31, 2015. Other than the \$32 adjustment, there were no restructuring activities during the twelve months ended December 31, 2013 and 2015.

	Original Charges and Amounts Accrued	Adjustments to Charges	Amounts Paid through December 31, 2015	Amounts Accrued at December 31, 2015
Employee severance, benefits and related costs	\$ 624	\$ 32	\$ 656	\$ —
	\$ 624	\$ 32	\$ 656	\$ —

METABOLIX, INC.

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18. Geographic Information

The geographic distribution of the Company's revenues and long-lived assets from continuing operations is summarized as follows:

	<u>U.S.</u>	<u>Canada</u>	<u>Eliminations</u>	<u>Total</u>
Year Ended December 31, 2015				
Net revenues to unaffiliated customers	\$ 2,593	\$ 1	\$ —	\$ 2,594
Inter-geographic revenues	—	769	(769)	—
Net revenues	<u>\$ 2,593</u>	<u>\$ 770</u>	<u>\$ (769)</u>	<u>\$ 2,594</u>
Identifiable long-lived assets	\$ 903	\$ 2	\$ —	\$ 905
Year Ended December 31, 2014				
Net revenues to unaffiliated customers	\$ 2,668	\$ 132	\$ —	\$ 2,800
Inter-geographic revenues	—	744	(744)	—
Net revenues	<u>\$ 2,668</u>	<u>\$ 876</u>	<u>\$ (744)</u>	<u>\$ 2,800</u>
Identifiable long-lived assets	\$ 441	\$ 15	\$ —	\$ 456
Year Ended December 31, 2013				
Net revenues to unaffiliated customers	\$ 3,505	\$ 273	\$ —	\$ 3,778
Inter-geographic revenues	—	794	(794)	—
Net revenues	<u>\$ 3,505</u>	<u>\$ 1,067</u>	<u>\$ (794)</u>	<u>\$ 3,778</u>
Identifiable long-lived assets	\$ 752	\$ 41	\$ —	\$ 793

Foreign revenue is based on the country in which the Company's subsidiary that earned the revenue is domiciled. During 2015 and 2014, revenue earned from the Company's REFABB grant with U.S. Department of Energy totaled \$1,028 and \$1,240, respectively, and represented 40% and 44% of total revenue. During the year ended December, 31, 2015, one biopolymer customer represented 10% or more of the Company's total product revenues and 37% of total revenue.

METABOLIX, INC.

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19. Summary of Quarterly Financial Data (unaudited)

The following tables summarize the unaudited quarterly financial data for the last two fiscal years.¹

	Quarter ended			
	March 31,	June 30,	September 30,	December 31,
2015				
Total revenues	\$ 645	\$ 744	\$ 709	\$ 496
Loss from continuing operations	(5,843)	(6,073)	(5,848)	(5,917)
Net loss	\$ (5,843)	\$ (6,073)	\$ (5,848)	\$ (5,917)
Basic and diluted net loss per share	\$ (0.26)	\$ (0.26)	\$ (0.22)	\$ (0.22)
2014				
Total revenues	\$ 613	\$ 699	\$ 632	\$ 856
Loss from continuing operations	(7,491)	(6,762)	(6,708)	(5,807)
Loss from discontinued operations	(663)	(473)	(1,185)	(445)
Net loss	\$ (8,154)	\$ (7,235)	\$ (7,893)	\$ (6,252)
Basic and diluted net loss per share				
Continuing operations	(1.30)	(1.16)	(0.71)	(0.29)
Discontinued operation	(0.11)	(0.08)	(0.13)	(0.02)
Basic and diluted net loss per share	\$ (1.41)	\$ (1.24)	\$ (0.84)	\$ (0.31)

The table above was retrospectively adjusted to reflect the Company's reverse stock split completed in May 2015.

¹Full year amounts may not sum due to rounding.

20. Subsequent Events

On January 20, 2016, the Company entered into a lease agreement, pursuant to which the Company will lease approximately 30,000 square feet of office and research and development space located at 19 Presidential Way, Woburn, Massachusetts. The lease will commence on June 1, 2016 and end on December 31, 2026, subject to adjustment depending on the date that renovations of the premises are substantially completed. Annual base rental payments due under the lease will be approximately \$216 during the first lease year, \$725 during the second lease year and \$785 during the third lease year and a total of \$7,346 for the remainder of the lease. The Company provided the landlord with a security deposit in the form of a letter of credit in the amount of \$307. Pursuant to the lease, the Company also will also pay certain taxes and facility operating costs associated with the premises during the term of the lease. The Company will receive up to \$889 from the landlord for tenant improvements to the premises and may elect to receive up to an additional \$444 in tenant improvements with certain adjustments in rent.

On January 20, 2016, the Company entered into an agreement with the landlord for its Cambridge, Massachusetts facility to terminate the lease effective July 31, 2016. After giving effect of the termination, the Company's future minimum payments will be reduced by \$502, \$1,223, \$1,252, \$1,280 and \$461 during 2016, 2017, 2018, 2019 and 2020, respectively. There are no termination penalties or payments associated with the early termination of this lease.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Forms S-3 (No. 333-193397) and S-8 (Nos. 333-138631, 333-145232, 333-155115, 333-157869, 333-165405, 333-172724, 333-181268, 333-187589, 333-194858, 333-194859, and 333-202983) of Metabolix, Inc. of our report dated March 29, 2016 relating to the financial statements, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
March 29, 2016

CERTIFICATIONS

I, Joseph Shaulson certify that:

1. I have reviewed this annual report on Form 10-K of Metabolix, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2016

/s/ JOSEPH SHAULSON

Name: Joseph Shaulson
President and Chief Executive Officer
Title: *(Principal Executive Officer)*

CERTIFICATIONS

I, Charles B. Haaser, certify that:

1. I have reviewed this annual report on Form 10-K of Metabolix, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 29, 2016

/s/ CHARLES B. HAASER

Name: Charles B. Haaser
Chief Accounting Officer
Title: *(Principal Financial and Accounting Officer)*

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report on Form 10-K of Metabolix, Inc. (the "Company") for the year ended December 31, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Joseph Shaulson, President, Chief Executive Officer and Principal Executive Officer of the Company and Charles B. Haaser, Chief Accounting Officer and Principal Financial and Accounting Officer of the Company, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to my knowledge that:

1. the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and
2. the information in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification is being provided pursuant to 18 U.S.C. 1350 and is not to be deemed a part of the Report, nor is it to be deemed to be "filed" for any purpose whatsoever.

METABOLIX, INC.

Date: March 29, 2016

By: /s/ JOSEPH SHAULSON

Joseph Shaulson
President and Chief Executive Officer (Principal Executive Officer)

Date: March 29, 2016

By: /s/ CHARLES B. HAASER

Charles B. Haaser
Chief Accounting Officer (Principal Financial and Accounting Officer)

