FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| Check this box if no longer subject to |
|--|
| Section 16. Form 4 or Form 5 |
| obligations may continue. See |
| Instruction 1(b). |

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934

| | VAL |
|-------------------------|-----------|
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| | u). | | Filed pursually to Section 10(a) of the Securities Exchange Act of 19 | J 4 | | | | | |
|----------------------|-----------------------|---------------------|--|-------------------|--|-----------------------|--|--|--|
| | | | or Section 30(h) of the Investment Company Act of 1940 | | | | | | |
| | dress of Reporting | Person [*] | 2. Issuer Name and Ticker or Trading Symbol METABOLIX, INC. [MBLX] | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | |
| Muller Edw | vard M | | | X | Director | 10% Owner | | | |
| (Last) C/O METABO | (First) OLIX, INC. | (Middle) | 3. Date of Earliest Transaction (Month/Day/Year) 09/02/2008 | | Officer (give title below) | Other (specify below) | | | |
| 21 ERIE STREET | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) | 6. Indiv Line) | vidual or Joint/Group Filing (Check Applicable | | | | |
| (Street) | | | 09/04/2008 | X | Form filed by One Re | porting Person | | | |
| CAMBRIDGI | E MA | 02139 | | | Form filed by More that Person | an One Reporting | | | |
| (City) | (State) | (Zip) | | | | | | | |

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | Transaction Code (Instr. | | | | | 5. Amount of Securities Beneficially Owned Following Reported | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|--|---|-----------------------------|---|--------|---------------|---------------------------------|---|---|---|
| | | | Code | v | Amount | (A) or (D) | Price | Transaction(s) (Instr. 3 and 4) | | (1150.4) |
| Common Stock | 09/02/2008 | | S ⁽¹⁾ | | 15,000 | D | \$10.9467 ⁽²⁾ | 840,091 | D | |
| Common Stock | | | | | | | | 23,376 | Ι | By The Lara Muller Irrevocable Trust 2000 ⁽³⁾ |

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transa Code (8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | d 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---|---|--|---|------------------------------|---|---|-----|--|--------------------|---|--|---|--|--|--|
| | | | | Code | v | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |

Explanation of Responses:

1. Transaction effected pursuant to a Rule 10b5-1 trading plan established by the reporting person on 3/14/08.

2. Price reflected is the average sale price for the shares sold. Please see attached Exhibit 99 for a complete list of all sales by sale price.

3. Held by a trust for the benefit of family members. The reporting person disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

| /s/ Sarah P. Cecil, attorney-in- | 09/29/2008 |
|----------------------------------|------------|
| fact | 09/29/2008 |

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

 * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.

Exhibit 99 filed on behalf of Edward Muller for Transaction date 09/02/08

| Price | Quantity |
|---------|----------|
| \$10.55 | 1,900 |
| \$10.56 | 200 |
| \$10.57 | 700 |
| \$10.58 | 200 |
| \$10.59 | 200 |
| \$10.60 | 1,000 |
| \$10.61 | 200 |
| \$10.62 | 600 |
| \$10.63 | 600 |
| \$10.64 | 200 |
| \$10.65 | 800 |
| \$10.66 | 300 |
| \$10.67 | 600 |
| \$11.15 | 1,600 |
| \$11.16 | 200 |
| \$11.17 | 700 |
| \$11.25 | 2,500 |
| \$11.40 | 1,800 |
| \$11.65 | 700 |
| | |