UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): March 15, 2013

MELA Sciences, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 000-51481 (Commission File Number) 13-3986004 (IRS Employer Identification No.)

50 South Buckhout Street, Suite 1 Irvington, New York (Address of principal executive offices)

10533 (Zip Code)

Registrant's telephone number, including area code (914) 591-3783

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 — Entry into a Material Definitive Agreement

On March 15, 2013, MELA Sciences, Inc. (the "Company") entered into a Loan and Security Agreement (the "Loan Agreement") with Hercules Technology Growth Capital Inc. (the "Lender") in connection with a loan of up to \$10 million. Of the \$10 million loan, \$6 million was funded on March 15, 2013 and the Company has the option to draw down the remaining \$4 million through March 17, 2014, subject to the satisfaction of meeting certain sales and revenue targets. The loan bears interest at the rate of 10.45% per year and matures on November 1, 2016. During the first 12 months of the loan, only interest will be paid to the Lender, and after that, the Company will make 30 equal payments of principal and interest until maturity. The loan is secured by a general lien against all of the Company's assets, other than its intellectual property assets. With respect to the Company's intellectual property assets, the Lender has a security interest in the proceeds of the disposition of any such assets; provided, however, that in the event a court of competent jurisdiction rules that a security interest in the underlying intellectual property assets is necessary in order to have a valid security interest in any proceeds from the disposition thereof, the Lender is granted a security interest, *nunc pro tunc*, in such underlying intellectual property assets.

In addition, the Lender is to receive a warrant to purchase that number of shares of our common stock equal to 775,000 divided by the exercise price of the warrant, which, under the terms of the Loan Agreement, is to be the lowest of (i) \$1.18, the closing price of the Company's Common Stock as reported on NASDAQ Capital Market on March 15, 2013, and (ii) the lowest volume-weighted average price (as calculated under the terms of the Loan Agreement) of a the Company's common Stock as reported on NASDAQ Capital Market in any consecutive three trading days during the 30 consecutive trading day period immediately prior to March 15, 2013 or the 30 consecutive trading day period immediately prior to the date of issuance of the Warrant. Under the terms of the Loan Agreement, the warrant is to be issued within five business days following the Company's receipt of the vote, consent or approval of its stockholders necessary to amend its Certificate of Incorporation to increase the Company's number of authorized shares of common stock by an amount sufficient to allow the issuance of the warrant.

In connection with the loan, the Company paid a \$100,000 facility charge to the Lender. In addition, on the earliest to occur of (i) the maturity date of the loan, (ii) the date that Company prepays the entire outstanding loan amount then due, or (iii) the date that the loan become due and payable under the terms of the Loan Agreement, the Company shall be obligated to pay the Lender an end of term charge of \$425,000; provided, however, that in the event the Company fails to deliver the warrant (as described above) on or before April 30, 2013, this end of term charge shall increase by \$100,000 on May 1, 2013 and shall continue to increase by an additional \$100,000 on the first day of each month thereafter until the warrant is delivered.

SIGNATURES

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

MELA Sciences, Inc.

Date: March 18, 2013

By: /s/ Richard I. Steinhart

Richard I. Steinhart Sr. VP & Chief Financial Officer