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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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FORM 8-K

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

DATE OF REPORT (DATE OF EARLIEST EVENT REPORTED): MAY 30, 2006

LEXICON GENETICS INCORPORATED  
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE  
(STATE OR OTHER JURISDICTION OF  
INCORPORATION OR ORGANIZATION)

000-30111  
(COMMISSION FILE NUMBER)

76-0474169  
(I.R.S. EMPLOYER  
IDENTIFICATION NUMBER)

8800 TECHNOLOGY FOREST PLACE  
THE WOODLANDS, TEXAS 77381  
(ADDRESS OF PRINCIPAL EXECUTIVE  
OFFICES AND ZIP CODE)

(281) 863-3000  
(REGISTRANT'S TELEPHONE NUMBER,  
INCLUDING AREA CODE)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligations of the registrant under any of the following provisions:

- 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))
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#### ITEM 1.01 ENTRY INTO A MATERIAL DEFINITIVE AGREEMENT

On May 30, 2006, we entered into an amendment to our Collaboration and License Agreement dated as of December 17, 2003 with Bristol-Myers Squibb Company relating to the discovery, development and commercialization of small molecule drugs in the neuroscience field. By way of the amendment, Bristol-Myers Squibb exercised its option under the original agreement to extend the target discovery portion of the alliance for an additional two years. Bristol-Myers Squibb will provide us with \$20 million in additional research funding over the two-year extension, which begins in January 2007.

The target discovery portion of the alliance encompasses the physiological and behavioral analysis of genes to identify promising new neuroscience targets for the development of small molecule drugs to treat disorders including depression, anxiety, schizophrenia, pain and Alzheimer's disease. The extension of the target discovery program term provides for further advanced research on selected targets.

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.

LEXICON GENETICS INCORPORATED

Date: June 1, 2006

By: /s/ JEFFREY L. WADE

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Jeffrey L. Wade  
Executive Vice President and  
General Counsel