

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC. 20549

SCHEDULE 14A  
(Rule 14A-101)

INFORMATION REQUIRED IN PROXY STATEMENT  
SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of  
the Securities Exchange Act of 1934

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to Rule 14a-11(c) or Rule 14a-12
- Confidential, for Use of the Commission Only  
(as permitted by Rule 14a-6(e)(2))

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**LEXICON PHARMACEUTICALS, INC.**

(Name of Registrant as Specified In Its Charter)

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(Name of Person(s) Filing Proxy Statement, if Other Than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
- Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

- (1) Title of each class of securities to which transaction applies: N/A
- (2) Aggregate number of securities to which transaction applies: N/A
- (3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): N/A
- (4) Proposed maximum aggregate value of transaction: N/A
- (5) Total fee paid: \$0

Fee paid previously with preliminary materials: N/A

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

- (1) Amount Previously Paid:
- (2) Form, Schedule or Registration Statement No.:
- (3) Filing Party:
- (4) Date Filed
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**\*\*\* Exercise Your *Right* to Vote \*\*\***  
**IMPORTANT NOTICE** Regarding the Availability of Proxy Materials

Meeting Information

**LEXICON PHARMACEUTICALS, INC.**

Meeting Type: Special Meeting  
For holders as of: May 21, 2009  
Date: July 15, 2009  
Time: 1:30 PM LST  
Location: Lexicon Pharmaceuticals, Inc.  
8800 Technology Forest Place  
The Woodlands, Texas

You are receiving this communication because you hold shares in the above named company.

This is not a ballot. You cannot use this notice to vote these shares. This communication presents only an overview of the more complete proxy materials that are available to you on the Internet. You may view the proxy materials online at [www.proxyvote.com](http://www.proxyvote.com) or easily request a paper copy (see reverse side).

We encourage you to access and review all of the important information contained in the proxy materials before voting.

See the reverse side of this notice to obtain proxy materials and voting instructions.

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LEXICON PHARMACEUTICALS, INC.  
8800 TECHNOLOGY FOREST PLACE  
THE WOODLANDS, TX 77381

**\*\*\* Before You Vote \*\*\***

How to Access the Proxy Materials

**Proxy Materials Available to VIEW or RECEIVE:**

1. Notice & Proxy Statement

**How to View Online:**

Have the 12-Digit Control Number available (located on the following page) and visit [www.proxyvote.com](http://www.proxyvote.com)

**How to Request and Receive a PAPER or E-MAIL Copy:**

If you want to receive a paper or email copy of these documents, you must request one. There is NO charge for requesting a copy. Please choose one of the following methods to make your request:

- |                  |  |
|------------------|--|
| 1) BY INTERNET:  | <a href="http://www.proxyvote.com">www.proxyvote.com</a>                   |
| 2) BY TELEPHONE: | 1-800-579-1639   |
| 3) BY E-MAIL*:   | <a href="mailto:sendmaterial@proxyvote.com">sendmaterial@proxyvote.com</a> |

\* If requesting materials by e-mail, please send a blank email with the 12-Digit Control Number (located on the following page) in the subject line

Requests, instructions and other inquiries sent to this e-mail address will NOT be forwarded to your investment advisor. Please make the request as instructed above on or before July 01, 2009 to facilitate timely delivery.

**\*\*\* How to Vote \*\*\***

Please Choose One of the Following Voting Methods

**Vote In Person:** Many shareholder meetings have attendance requirements including, but not limited to, the possession of an attendance ticket issued by the entity holding the meeting. Please check the meeting materials for any special requirements for meeting attendance. At the Meeting you will need to request a ballot to vote these shares.

**Vote by Internet:** To vote now by Internet, go to [www.proxyvote.com](http://www.proxyvote.com). Have the 12 Digit Control Number available and follow the instructions.

**Vote by Mail:** You can vote by mail by requesting a paper copy of the materials, which will include a proxy card.

Voting items
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The Board of Directors recommends you vote FOR the following proposal(s)

1. Approval of an amendment to the Company's certificate of incorporation increasing the number of authorized shares of the Company's common stock from 300,000,000 to 900,000,000.

**NOTE:** In their discretion, upon such other business that may properly come before the meeting or any adjournment or adjournments thereof.

The shares represented by this proxy, when properly executed, will be voted in the manner directed herein by the undersigned Stockholder(s). If no direction is made, this proxy will be voted FOR item 1. If any other matters properly come before the meeting, or if cumulative voting is required, the person named in this proxy will vote in their discretion.