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

FORM 8-K/A

CURRENT REPORT

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

Date of Report (Date of earliest event reported): April 29, 2008

Lexicon Pharmaceuticals, Inc.

(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))

This Current Report on Form 8-K/A amends and restates the Current Report on Form 8-K filed by Lexicon Pharmaceuticals, Inc. with the Securities and Exchange Commission on April 29, 2008.

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers

(b) On April 29, 2008, the employment of Julia P. Gregory, our executive vice president and chief financial officer, was terminated without cause. In such capacity, Ms. Gregory had performed the functions of our principal financial officer and principal accounting officer.

(c) On April 29, 2008, James F. Tessmer assumed the functions of our principal financial officer and principal accounting officer. Mr. Tessmer, 48, has been our vice president, finance and accounting since November 2007 and previously served as our senior director of finance from February 2004 to November 2007 and director of finance from April 2001 to February 2004. Mr. Tessmer is a certified public accountant and received his B.B.A. from the University of Wisconsin – Milwaukee and his M.B.A. from the University of Houston.

(e) On April 29, 2008, we entered into a consulting agreement with Ms. Gregory pursuant to which we agreed to pay Ms. Gregory \$6,000 per month for up to two days of her consulting services per month. The payments under the consulting agreement are in addition to and separate from the severance payments to which Ms. Gregory is entitled under her employment agreement with us. The consulting agreement has a term of one year, subject to earlier termination in certain circumstances.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

Exhibit No.		Description
10.1	—	Consulting Agreement with Julia P. Gregory dated April 29, 2008

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 Pharmaceuticals, Inc.

Date: April 30, 2008

By:

/s/ Jeffrey L. Wade Jeffrey L. Wade Executive Vice President and General Counsel

Exhibit No. 10.1

Description

-Consulting Agreement with Julia P. Gregory dated April 29, 2008

April 29, 2008

Ms. Julia P. Gregory

Dear Julia:

We invite you to serve as a consultant to Lexicon Pharmaceuticals, Inc. (which, together with its subsidiaries and affiliates, is referred to as the "Company" or "Lexicon"). The purpose of this letter agreement (this "Agreement") is to set forth our mutual understanding of the terms and conditions under which you would provide consulting services, as set forth below.

1. <u>Consulting Services</u>. Under this agreement, you will provide such consulting and advisory services as may be requested by Arthur T. Sands, M.D., Ph.D., the Company's President and Chief Executive Officer, or his designee relating to matters previously within the scope of your employment at Lexicon prior to the termination of such employment. You will devote up to two (2) days per month to providing such services to the Company under this Agreement, on a schedule and at times reasonably agreed upon by you and Dr. Sands.

2. <u>Compensation</u>. As full consideration for your services as a consultant to the Company and your obligations under this Agreement, you will receive a monthly retainer of \$6,000, with the first such payment being due thirty (30) days after the date of this letter. In addition, you will be reimbursed for your reasonable, ordinary and necessary travel expenses incurred by you at the Company's prior request in connection with your performance of your services under this Agreement.

3. <u>Confidential Information</u>.

(a) In the course of your service as a consultant to the Company, you may learn or be exposed, orally, visually, electronically or in writing, to inventions, discoveries, improvements, materials, data, technology, processes, formulas, know-how, trade secrets, ideas and other information which we consider proprietary or confidential ("Confidential Information"). You agree to hold any Confidential Information disclosed to you by the Company or learned by you from the Company in conjunction with your services under this Agreement in strict confidence and to take all reasonable precautions to protect such Confidential Information, not to disclose any such Confidential Information to any third party, and to use such Confidential Information only in furtherance of your services under this Agreement; *provided* that your nondisclosure obligation shall not apply to the extent such Confidential Information (i) is already in the public domain or hereafter enters the public domain other than through your acts or omissions in violation of this Agreement; (ii) is already known to you, as may be shown by competent written records; (iii) is hereafter received by you without restriction as to confidentiality or use from a third party lawfully entitled so to disclose same in such manner; or (iv) is hereafter generated by you, other than in performance of your services under this Agreement this Agreement, without the use of any Confidential Information, facilities or personnel of the Company. Information shall not be deemed to be within the foregoing exceptions merely because such information is embraced by more general information in the public domain or in your possession. All Confidential Information (and any copies and notes thereof) shall remain the sole property of the Company.

(b) You agree not to disclose or otherwise make available to the Company any information that you possess under an obligation of confidentiality to a third party. You may disclose to the Company any information made available generally to the scientific community at large through published reports or public presentations prior to disclosure to the Company.

4. <u>Inventions and Discoveries</u>.

(a) You hereby assign and transfer to the Company all of your right, title and interest throughout the world in all inventions, discoveries, improvements, materials, data, works of authorship and other intellectual property, whether or not patentable or subject to copyright, which may be made, written or conceived by you in the course of, or arising as a result of, your performance of your services under this Agreement, in whole or in part and whether alone or in conjunction with others (collectively, "Intellectual Property"). All such Intellectual Property shall be the sole property of the Company or its nominee.

(b) You shall promptly disclose any Intellectual Property in writing to the Company in order to permit the Company to claim rights to which it may be entitled under this Agreement. The Company shall have full power and authority to file and prosecute patent applications and copyright registrations throughout the world with respect to all Intellectual Property, and to procure and maintain patents and copyrights with respect thereto. You agree, at the Company's reasonable request and expense, to sign, execute and acknowledge, or cause to be signed, executed and acknowledged, any applications, assignments, instruments and other documents, and to perform such other acts, as the Company may deem necessary, useful or convenient to confirm and vest in the Company or its nominee all right, title and interest throughout the world in and to any Intellectual Property and all patent, copyright and other intellectual property rights and protections therein, and to assist the Company in procuring, maintaining, enforcing and defending such patent, copyright and other intellectual property rights and protections throughout the world. You agree to treat all such Intellectual Property as Confidential Information under this Agreement.

5. Term and Termination. You will render your advisory and consulting services to the Company for a period of one year commencing upon the date of this letter, at which time this Agreement will terminate. This Agreement shall terminate if you have not signed the Release and Severance Agreement with the Company dated April 29, 2008 within twenty-one (21) days of the date of this letter, or if you revoke such Release and Severance Agreement. This Agreement may be earlier terminated by either party for breach of this Agreement by the other party that, where curable, is not cured within ten (10) business days after written notice of such breach is delivered to the breaching party. The termination of this Agreement shall not relieve the parties of any obligation accruing prior to such termination.

6. <u>Independent Contractor</u>. For purposes of this Agreement, you will be deemed an independent contractor and not an employee or agent of Lexicon. In this connection, you will not be eligible for, nor entitled to, any employee benefits that we normally extend to our employees, and we will not withhold any taxes from the compensation paid to you, all of which shall be your responsibility. The manner in which you render your services under this Agreement will be within your reasonable control and discretion. You have no express or implied authority to incur any liability, or to make any decision or to create any binding obligation, on our behalf.

7. <u>Compliance with Laws and Procedures</u>. To the extent you provide services under this Agreement on our premises, you agree to observe our business hours, as well as our rules, policies and security procedures concerning conduct and the health, safety and protection of persons and property. You will comply with all applicable governmental laws, ordinances, rules and regulations applicable to the performance of your services under this Agreement.

8. <u>Governing Law</u>. This Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of Texas as they apply to contracts entered into and wholly to be performed in Texas.

9. <u>Enforcement</u>. You agree that a breach of any of the restrictions set forth in the provisions of this Agreement would cause the Company irreparable injury and damage, and that, in the event of any breach or threatened breach, the Company, in addition to all other rights and remedies at law or in equity, shall have the right to enforce the specific performance of such restrictions and to apply for injunctive relief against their violation.

10. <u>Survival of Terms</u>. The provisions of Sections 3, 4 and 7 through 15 hereof shall survive termination of this Agreement.

11. <u>Successors and Assigns</u>. You may not assign this Agreement without the written consent of the Company. This Agreement shall be binding on your heirs, executors, administrators and legal representatives and the Company's successors and assigns.

12. <u>Severability</u>. The invalidity or unenforceability of any provision of this Agreement (or portion thereof) shall not affect the validity or enforceability of any other provision of this Agreement, and if such provision (or portion thereof) is so broad as to be unenforceable, it shall be interpreted to be only as broad as is enforceable.

13. <u>Entire Agreement</u>. This Agreement constitutes the sole and complete agreement of the parties with respect to the matters included herein, and supersedes any previous oral or written agreement, if any, relating to the subject matters included herein.

14. <u>Amendment and Waiver</u>. This Agreement may not be amended or supplemented in any way, nor may the benefit of any provision hereof be waived, except by a written agreement duly executed by both you and the Company.

15. <u>No Conflict</u>. You represent that the performance of your obligations and duties under this Agreement does not conflict with any obligations or duties, express or implied, that you may have to third parties.

16. <u>Construction</u>. Each party to this Agreement has had the opportunity to review this Agreement with legal counsel. This Agreement shall not be construed or interpreted against any party on the basis that such party drafted or authored a particular provision, parts of or the entirety of this Agreement.

If the foregoing correctly sets forth our mutual understanding, please so indicate by signing this letter in the space provided below and return it to the Company at the above address on the date hereof, whereupon this Agreement shall constitute a binding contract between us and our legal representatives, successors, and assigns.

Very truly yours,

LEXICON PHARMACEUTICALS, INC.

By: /s/ Arthur T. Sands

Arthur T. Sands, M.D., Ph.D. President and Chief Executive Officer

Accepted and agreed to:

By: <u>/s/ Julia P. Gregory</u> Julia P. Gregory

Date: April 29, 2008