
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): APRIL 27, 2005

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 April 27, 2005, our stockholders ratified and approved an amendment to our 2000 Non-Employee Directors' Stock Option Plan (the "Plan"). The Plan previously provided that all non-employee directors who had served in such capacity for six months would be granted an annual option to purchase 6,000 shares of our common stock. The amendment to the Plan increases the number of shares of our common stock underlying each annual option grant to 10,000 shares.

A copy of the Plan reflecting the amendment is attached to this current report on Form 8-K as Exhibit 10.1.

ITEM 2.02 RESULTS OF OPERATIONS AND FINANCIAL CONDITION

On April 28, 2005, we issued a press release to report our financial results for the quarter ended March 31, 2005. A copy of the press release is attached to this current report on Form 8-K as Exhibit 99.1.

The information in Item 2.02 of this Form 8-K and Exhibit 99.1 attached to this Form 8-K shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

ITEM 9.01 FINANCIAL STATEMENTS AND EXHIBITS

(c) Exhibits

EXHIBIT NO.		DESCRIPTION
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10.1	--	2000 Non-Employee Directors' Stock Option Plan
99.1	--	Press Release of Lexicon Genetics Incorporated dated April 28, 2005

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: April 28, 2005

By: /s/ JEFFREY L. WADE

Jeffrey L. Wade
Executive Vice President and
General Counsel

INDEX TO EXHIBITS

EXHIBIT NO.		DESCRIPTION
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10.1	--	2000 Non-Employee Directors' Stock Option Plan
99.1	--	Press Release of Lexicon Genetics Incorporated dated April 28, 2005

LEXICON GENETICS INCORPORATED
2000 NON-EMPLOYEE DIRECTORS' STOCK OPTION PLAN

(RESTATED TO REFLECT SPLIT PRIOR TO IPO)

1 PURPOSES.

(a) ELIGIBLE OPTION RECIPIENTS. The persons eligible to receive Options are the Non-Employee Directors of the Company.

(b) AVAILABLE OPTIONS. The purpose of the Plan is to provide a means by which Non-Employee Directors may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Nonstatutory Stock Options.

(c) GENERAL PURPOSE. The Company, by means of the Plan, seeks to retain the services of its Non-Employee Directors, to secure and retain the services of new Non-Employee Directors and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Affiliates.

2 DEFINITIONS.

(a) "AFFILIATE" means any parent corporation or subsidiary corporation of the Company, whether now or hereafter existing, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(b) "ANNUAL GRANT" means an Option granted annually to all Non-Employee Directors who meet the specified criteria pursuant to subsection 6(b) of the Plan.

(c) "ANNUAL MEETING" means the annual meeting of the stockholders of the Company.

(d) "BOARD" means the Board of Directors of the Company.

(e) "CODE" means the Internal Revenue Code of 1986, as amended.

(f) "COMMON STOCK" means the common stock, par value \$.001 per share, of the Company.

(g) "COMPANY" means Lexicon Genetics Incorporated, a Delaware corporation.

(h) "CONSULTANT" means any person, including an advisor, (i) engaged by the Company or an Affiliate to render consulting or advisory services and who is compensated for such services or (ii) who is a member of the Board of Directors of an Affiliate. However, the term "Consultant" shall not include either Directors of the Company who are not compensated by the Company for their services as Directors or Directors of the Company who are merely paid a director's fee by the Company for their services as Directors.

(i) "CONTINUOUS SERVICE" means that the Optionholder's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. The Optionholder's Continuous Service shall not be deemed to have terminated merely because of a change in

the capacity in which the Optionholder renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Optionholder renders such service, provided that there is no interruption or termination of the Optionholder's Continuous Service. For example, a change in status from a Non-Employee Director of the Company to a Consultant of an Affiliate or an Employee of the Company will not constitute an interruption of Continuous Service. The Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service shall be considered interrupted in the case of any leave of absence approved by that party, including sick leave, military leave or any other personal leave.

(j) "DIRECTOR" means a member of the Board of Directors of the Company.

(k) "DISABILITY" means the permanent and total disability of a person within the meaning of Section 22(e)(3) of the Code.

(l) "EMPLOYEE" means any person employed by the Company or an Affiliate. Mere service as a Director or payment of a director's fee by the Company or an Affiliate shall not be sufficient to constitute "employment" by the Company or an Affiliate.

(m) "EXCHANGE ACT" means the Securities Exchange Act of 1934, as amended.

(n) "FAIR MARKET VALUE" means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on the Nasdaq National Market or the Nasdaq SmallCap Market, the Fair Market Value of a share of Common Stock shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the last market trading day prior to the day of determination, as reported in The Wall Street Journal or such other source as the Board deems reliable.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value shall be determined in good faith by the Board.

(o) "INITIAL GRANT" means an Option granted to a Non-Employee Director who meets the specified criteria pursuant to subsection 6(a) of the Plan.

(p) "IPO DATE" means the effective date of the initial public offering of the Common Stock.

(q) "NON-EMPLOYEE DIRECTOR" means a Director who is not an Employee.

(r) "NONSTATUTORY STOCK OPTION" means an Option not intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(s) "OFFICER" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(t) "OPTION" means a Nonstatutory Stock Option granted pursuant to the Plan.

(u) "OPTION AGREEMENT" means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an individual Option grant. Each Option Agreement shall be subject to the terms and conditions of the Plan.

(v) "OPTIONHOLDER" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(w) "PLAN" means this Lexicon Genetics Incorporated 2000 Non-Employee Directors' Stock Option Plan.

(x) "RULE 16B-3" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b 3, as in effect from time to time.

(y) "SECURITIES ACT" means the Securities Act of 1933, as amended.

3 ADMINISTRATION.

(a) ADMINISTRATION BY BOARD. The Board shall administer the Plan. The Board may not delegate administration of the Plan to a committee.

(b) POWERS OF BOARD. The Board shall have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine the provisions of each Option to the extent not specified in the Plan.

(ii) To construe and interpret the Plan and Options granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Option Agreement, in a manner and to the extent it shall deem necessary or expedient to make the Plan fully effective.

(iii) To amend the Plan or an Option as provided in Section 12.

(iv) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company that are not in conflict with the provisions of the Plan.

(c) EFFECT OF BOARD'S DECISION. All determinations, interpretations and constructions made by the Board in good faith shall not be subject to review by any person and shall be final, binding and conclusive on all persons.

4 SHARES SUBJECT TO THE PLAN.

(a) SHARE RESERVE. Subject to the provisions of Section 11 relating to adjustments upon changes in the Common Stock, the Common Stock that may be issued pursuant to Options shall not exceed in the aggregate Six Hundred Thousand (600,000) shares of Common Stock.

(b) EVERGREEN SHARE RESERVE INCREASE.

(i) Notwithstanding subsection 4(a) hereof, on the day after each Annual Meeting (the "Calculation Date") for a period of ten (10) years, commencing with the Annual Meeting in

2000, the aggregate number of shares of Common Stock that is available for issuance under the Plan shall automatically be increased by that number of shares equal to the greater of (1) three-tenths of one percent (0.3%) of the Diluted Shares Outstanding or (2) the number of shares of Common Stock subject to Options granted during the prior 12-month period; provided, however, that the Board, from time to time, may provide for a lesser increase in the aggregate number of shares of Common Stock that is available for issuance under the Plan.

(ii) "Diluted Shares Outstanding" shall mean, as of any date, (1) the number of outstanding shares of Common Stock of the Company on such Calculation Date, plus (2) the number of shares of Common Stock issuable upon such Calculation Date assuming the conversion of all outstanding Preferred Stock and convertible notes, plus (3) the additional number of dilutive Common Stock equivalent shares outstanding as the result of any options or warrants outstanding during the fiscal year, calculated using the treasury stock method.

(c) REVERSION OF SHARES TO THE SHARE RESERVE. If any Option shall for any reason expire or otherwise terminate, in whole or in part, without having been exercised in full, the shares of Common Stock not acquired under such Option shall revert to and again become available for issuance under the Plan.

(d) SOURCE OF SHARES. The shares of Common Stock subject to the Plan may be unissued shares or reacquired shares, bought on the market or otherwise.

5 ELIGIBILITY.

The Options as set forth in section 6 automatically shall be granted under the Plan to all Non-Employee Directors.

6 NON-DISCRETIONARY GRANTS.

(a) INITIAL GRANTS. Without any further action of the Board, each person who is elected or appointed for the first time to be a Non-Employee Director automatically shall, upon the date of his or her initial election or appointment to be a Non-Employee Director, be granted an Initial Grant to purchase Thirty Thousand (30,000) shares of Common Stock on the terms and conditions set forth herein.

(b) ANNUAL GRANTS. Without any further action of the Board, on the day following each Annual Meeting, commencing with the Annual Meeting in 2001, each person who is then a Non-Employee Director, and has been a Non-Employee Director for at least six (6) months, automatically shall be granted an Annual Grant to purchase Ten Thousand (10,000) shares of Common Stock on the terms and conditions set forth herein.

7 OPTION PROVISIONS.

Each Option shall be in such form and shall contain such terms and conditions as required by the Plan. Each Option shall contain such additional terms and conditions, not inconsistent with the Plan, as the Board shall deem appropriate. Each Option shall include (through incorporation of provisions hereof by reference in the Option or otherwise) the substance of each of the following provisions:

(a) TERM. No Option shall be exercisable after the expiration of ten (10) years from the date it was granted.

(b) EXERCISE PRICE. The exercise price of each Option shall be one hundred percent (100%) of the Fair Market Value of the stock subject to the Option on the date the Option is granted.

(c) CONSIDERATION. The purchase price of stock acquired pursuant to an Option may be paid, to the extent permitted by applicable statutes and regulations, in any combination of (i) cash or check, or (ii) delivery to the Company of other Common Stock. The purchase price of Common Stock acquired pursuant to an Option that is paid by delivery to the Company of other Common Stock acquired, directly or indirectly from the Company, shall be paid only by shares of the Common Stock of the Company that have been held for more than six (6) months (or such longer or shorter period of time required to avoid a charge to earnings for financial accounting purposes). At any time that the Company is incorporated in Delaware, payment of the Common Stock's "par value," as defined in the Delaware General Corporation Law, shall not be made by deferred payment.

(d) TRANSFERABILITY. An Option is not transferable, except (i) by will or by the laws of descent and distribution, (ii) by instrument to an inter vivos or testamentary trust, in a form accepted by the Company, in which the Option is to be passed to beneficiaries upon the death of the trustor (settlor) and (iii) by gift, in a form accepted by the Company, to a member of the "immediate family" of the Optionholder as that term is defined in 17 C.F.R. 240.16a-1(e). In addition, Optionholder may, by delivering written notice to the Company, in a form satisfactory to the Company, designate a third party who, in the event of the death of the Optionholder, shall thereafter be entitled to exercise the Option.

(e) VESTING. Options shall vest as follows:

(i) Initial Grants shall provide for vesting of 1/60th of the shares subject to the Option each month after grant for five (5) years after the date of the grant.

(ii) Annual Grants shall provide for vesting of 1/12th of the shares subject to the Option each month after grant for twelve (12) months after the date of the grant.

(f) TERMINATION OF CONTINUOUS SERVICE. In the event an Optionholder's Continuous Service terminates (other than upon the Optionholder's death or Disability), the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise it as of the date of termination) but only within such period of time ending on the earlier of (i) the date six (6) months following the termination of the Optionholder's Continuous Service, or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after termination, the Optionholder does not exercise his or her Option within the time specified in the Option Agreement, the Option shall terminate.

(g) EXTENSION OF TERMINATION DATE. If the exercise of the Option following the termination of the Optionholder's Continuous Service (other than upon the Optionholder's death or Disability) would be prohibited at any time solely because the issuance of shares would violate the registration requirements under the Securities Act, then the Option shall terminate on the earlier of (i) the expiration of the term of the Option set forth in subsection 7(a) or (ii) the expiration of a period of three (3) months after the termination of the Optionholder's Continuous Service during which the exercise of the Option would not be in violation of such registration requirements.

(h) DISABILITY OF OPTIONHOLDER. In the event an Optionholder's Continuous Service terminates as a result of the Optionholder's Disability, the Optionholder may exercise his or her Option (to the extent that the Optionholder was entitled to exercise it as of the date of termination), but only within such period of time ending on the earlier of (i) the date twelve (12) months following such termination or (ii) the expiration of the term of the Option as set forth in the Option Agreement. If, after

termination, the Optionholder does not exercise his or her Option within the time specified herein, the Option shall terminate.

(i) DEATH OF OPTIONHOLDER. In the event (i) an Optionholder's Continuous Service terminates as a result of the Optionholder's death or (ii) the Optionholder dies within the three-month period after the termination of the Optionholder's Continuous Service for a reason other than death, then the Option may be exercised (to the extent the Optionholder was entitled to exercise the Option as of the date of death) by the Optionholder's estate, by a person who acquired the right to exercise the Option by bequest or inheritance or by a person designated to exercise the Option upon the Optionholder's death, but only within the period ending on the earlier of (1) the date eighteen (18) months following the date of death or (2) the expiration of the term of such Option as set forth in the Option Agreement. If, after death, the Option is not exercised within the time specified herein, the Option shall terminate.

8 COVENANTS OF THE COMPANY.

(a) AVAILABILITY OF SHARES. During the terms of the Options, the Company shall keep available at all times the number of shares of Common Stock required to satisfy such Options.

(b) SECURITIES LAW COMPLIANCE. The Company shall seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Options and to issue and sell shares of Common Stock upon exercise of the Options; provided, however, that this undertaking shall not require the Company to register under the Securities Act the Plan, any Option or any stock issued or issuable pursuant to any such Option. If, after reasonable efforts, the Company is unable to obtain from any such regulatory commission or agency the authority which counsel for the Company deems necessary for the lawful issuance and sale of stock under the Plan, the Company shall be relieved from any liability for failure to issue and sell stock upon exercise of such Options unless and until such authority is obtained.

9 USE OF PROCEEDS FROM STOCK.

Proceeds from the sale of stock pursuant to Options shall constitute general funds of the Company.

10 MISCELLANEOUS.

(a) STOCKHOLDER RIGHTS. No Optionholder shall be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares subject to such Option unless and until such Optionholder has satisfied all requirements for exercise of the Option pursuant to its terms.

(b) NO SERVICE RIGHTS. Nothing in the Plan or any instrument executed or Option granted pursuant thereto shall confer upon any Optionholder any right to continue to serve the Company as a Non-Employee Director or shall affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(c) INVESTMENT ASSURANCES. The Company may require an Optionholder, as a condition of exercising or acquiring stock under any Option, (i) to give written assurances satisfactory to the Company as to the Optionholder's knowledge and experience in financial and business matters and/or

to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that he or she is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Option; and (ii) to give written assurances satisfactory to the Company stating that the Optionholder is acquiring the stock subject to the Option for the Optionholder's own account and not with any present intention of selling or otherwise distributing the stock. The foregoing requirements, and any assurances given pursuant to such requirements, shall be inoperative if (iii) the issuance of the shares upon the exercise or acquisition of stock under the Option has been registered under a then currently effective registration statement under the Securities Act or (iv) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the stock.

(d) WITHHOLDING OBLIGATIONS. The Optionholder may satisfy any federal, state or local tax withholding obligation relating to the exercise or acquisition of stock under an Option by any of the following means (in addition to the Company's right to withhold from any compensation paid to the Optionholder by the Company) or by a combination of such means: (i) tendering a cash payment; (ii) authorizing the Company to withhold shares from the shares of the Common Stock otherwise issuable to the Optionholder as a result of the exercise or acquisition of stock under the Option, provided, however, that no shares of Common Stock are withheld with a value exceeding the minimum amount of tax required to be withheld by law; or (iii) delivering to the Company owned and unencumbered shares of the Common Stock.

11 ADJUSTMENTS UPON CHANGES IN STOCK.

(a) CAPITALIZATION ADJUSTMENTS. If any change is made in the stock subject to the Plan, or subject to any Option, without the receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other transaction not involving the receipt of consideration by the Company), the Plan will be appropriately adjusted in the class(es) and maximum number of securities subject both to the Plan pursuant to subsection 4(a) and to the nondiscretionary Options specified in Section 5, and the outstanding Options will be appropriately adjusted in the class(es) and number of securities and price per share of stock subject to such outstanding Options. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. (The conversion of any convertible securities of the Company shall not be treated as a transaction "without receipt of consideration" by the Company.)

(b) CHANGE IN CONTROL -- DISSOLUTION OR LIQUIDATION. In the event of a dissolution or liquidation of the Company, then all outstanding Options shall terminate immediately prior to such event.

(c) CHANGE IN CONTROL -- ASSET SALE, MERGER, CONSOLIDATION OR REVERSE MERGER.

(i) In the event of (i) a sale, lease or other disposition of all or substantially all of the assets of the Company, (ii) a merger or consolidation in which the Company is not the surviving corporation or (iii) a reverse merger in which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger are converted by virtue of the merger into other property, whether in the form of securities, cash or otherwise, then any surviving corporation or acquiring corporation shall assume any Options outstanding under the

Plan or shall substitute similar Options (including an option to acquire the same consideration paid to the stockholders in the transaction described in this subsection 11(c) for those outstanding under the Plan).

(ii) In the event any surviving corporation or acquiring corporation refuses to assume such Options or to substitute similar Options for those outstanding under the Plan, then the vesting of such Options and the vesting of any shares of Common Stock acquired pursuant to such Options shall be accelerated in full, and the Options shall terminate if not exercised at or prior to such event.

(iii) In the event any surviving corporation or acquiring corporation assumes such Options or substitutes similar Options for those outstanding under the Plan but the Optionholder is not elected or appointed to the board of directors of the surviving corporation or acquiring corporation at the first meeting of such board of directors after such change in control event, then the vesting of such Options and the vesting of any shares of Common Stock acquired pursuant to such Options shall be accelerated by eighteen (18) months on the day after the first meeting of the board of directors of the surviving corporation or acquiring corporation.

(iv) In the event any surviving corporation or acquiring corporation assumes such Options or substitutes similar Options for those outstanding under the Plan and the Optionholder is elected or appointed to the board of directors of the surviving corporation or acquiring corporation at the first meeting of such board of directors after such change in control event, then the vesting of such Options and the vesting of any shares of Common Stock acquired pursuant to such Options shall not be accelerated.

12 AMENDMENT OF THE PLAN AND OPTIONS.

(a) AMENDMENT OF PLAN. The Board at any time, and from time to time, may amend the Plan. However, except as provided in Section 11 relating to adjustments upon changes in stock, no amendment shall be effective unless approved by the stockholders of the Company to the extent stockholder approval is necessary to satisfy the requirements of Rule 16b-3 or any Nasdaq or securities exchange listing requirements.

(b) STOCKHOLDER APPROVAL. The Board may, in its sole discretion, submit any other amendment to the Plan for stockholder approval.

(c) NO IMPAIRMENT OF RIGHTS. Rights under any Option granted before amendment of the Plan shall not be impaired by any amendment of the Plan unless (i) the Company requests the consent of the Optionholder and (ii) the Optionholder consents in writing.

(d) AMENDMENT OF OPTIONS. The Board at any time, and from time to time, may amend the terms of any one or more Options; provided, however, that the rights under any Option shall not be impaired by any such amendment unless (i) the Company requests the consent of the Optionholder and (ii) the Optionholder consents in writing.

13 TERMINATION OR SUSPENSION OF THE PLAN.

(a) PLAN TERM. The Board may suspend or terminate the Plan at any time. Unless sooner terminated, the Plan shall terminate on the day before the tenth (10th) anniversary of the date the Plan is adopted by the Board or approved by the stockholders of the Company, whichever is earlier. No Options may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) NO IMPAIRMENT OF RIGHTS. Suspension or termination of the Plan shall not impair rights and obligations under any Option granted while the Plan is in effect except with the written consent of the Optionholder.

14 EFFECTIVE DATE OF PLAN.

The Plan shall become effective on the IPO Date, but no Option shall be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval shall be within twelve (12) months before or after the date the Plan is adopted by the Board.

15 CHOICE OF LAW.

All questions concerning the construction, validity and interpretation of this Plan shall be governed by the law of the State of Delaware, without regard to such state's conflict of laws rules.

LEXICON GENETICS REPORTS
2005 FIRST QUARTER FINANCIAL RESULTS

FAVORABLE REVENUE AND EXPENSE RESULTS RELATIVE TO FINANCIAL GUIDANCE

THE WOODLANDS, TEXAS, APRIL 28, 2005 - Lexicon Genetics Incorporated (Nasdaq: LEXG), a biopharmaceutical company focused on discovering and developing breakthrough treatments for human disease, today reported financial results for the three months ended March 31, 2005.

REVENUES: Lexicon's revenues for the three months ended March 31, 2005 increased 18 percent to \$13.9 million from \$11.8 million for the corresponding period in 2004. The increase was primarily attributable to technology license fees received from Deltagen, Inc. in connection with the settlement of Lexicon's claim in Deltagen's bankruptcy proceedings. Revenue recognized under Lexicon's neuroscience drug discovery alliance with Bristol-Myers Squibb Company was the largest contributor to revenues in both periods.

RESEARCH AND DEVELOPMENT EXPENSES: Research and development expenses for the three months ended March 31, 2005 increased two percent to \$22.8 million from \$22.4 million for the corresponding period in 2004. The increase was primarily the result of increased personnel required to support the expansion and advancement of Lexicon's drug discovery programs and the cost of external research related to Lexicon's preclinical activities. It was offset by the elimination of expenses associated with the LifeSeq(R) Gold database and the absence of any stock-based compensation expense in the first quarter of 2005.

GENERAL AND ADMINISTRATIVE EXPENSES: General and administrative expenses for the three months ended March 31, 2005 decreased 12 percent to \$4.4 million from \$5.0 million for the corresponding period in 2004. The decrease was primarily attributable to the absence of any stock-based compensation expense in the three months ended March 31, 2005, as compared to \$411,000 in the three months ended March 31, 2004.

NET LOSS: Net loss for the three months ended March 31, 2005 decreased to \$13.3 million from a net loss of \$15.5 million in the corresponding period in 2004. Net loss per share for the three months ended March 31, 2005 was \$0.21, as compared to \$0.25 for the corresponding period in 2004.

CASH AND INVESTMENTS: As of March 31, 2005, Lexicon had \$70.7 million in cash and investments, including restricted cash and investments, compared to \$87.6 million as of December 31, 2004. Restricted cash and investments were \$0.4 million on both dates.

"We have had repeated success in translating our intellectual property assets into revenue growth," said Julia P. Gregory, executive vice president, corporate development and chief financial officer of Lexicon. "We believe that anticipated proceeds from new alliances, coupled with our committed revenue base, will enable us to meet our 2005 revenue guidance of \$70 million to \$75 million."

FIRST QUARTER 2005 HIGHLIGHTS

TWO PROGRAMS ADVANCE INTO PRECLINICAL DEVELOPMENT: Lexicon advanced two of its drug discovery programs into preclinical development in preparation for investigational new drug (IND) applications.

- o LX-1521 is a small molecule compound to be developed as a potential cancer treatment. LX-1521 works by blocking the cell cycle prior to cell division, resulting in cancer cell death through

apoptosis. Lexicon expects to file an IND for LX-1521 by the end of the year and commence a Phase 1 clinical trial for the compound shortly thereafter.

- o LX-5431 is a novel recombinant human protein to be developed as a potential biotherapeutic for thrombocytopenia, a condition that results in bleeding disorders. LX-5431 has been demonstrated in ex vivo bone marrow culture to stimulate production of platelet forming cells called megakaryocytes. Lexicon is currently developing scale-up methodologies to produce LX-5431 in quantities required for preclinical and early clinical development.

"In addition to our progress in our drug development programs, we are on track to fully evaluate 1,000 genes this year in the Genome5000(TM), having now completed the knockout and phenotypic analysis of more than 2,250 genes," said Arthur T. Sands, M.D., Ph.D., president and chief executive officer of Lexicon. "Our Genome5000 engine provides us with a recurring source of drug discoveries, and we are working independently and with our collaborators to advance these discoveries into new therapies for human disease."

DR. SAMUEL L. BARKER NAMED CHAIRMAN OF THE BOARD: Lexicon named Samuel L. Barker, Ph.D. chairman of its board of directors. Dr. Barker has been a director of Lexicon since March 2000. Dr. Barker held a series of leadership positions at Bristol-Myers Squibb Company until his retirement in 1999, including executive vice president, Worldwide Franchise Management and Strategy during 1998; president, United States Pharmaceuticals from 1992 to 1997; and president, Bristol-Myers Squibb Intercontinental Commercial Operations from 1990 to 1992. Prior to 1990, Dr. Barker held executive positions in research and development, manufacturing, finance, business development and sales and marketing at Squibb Pharmaceuticals.

SETTLEMENT OF CLAIM WITH DELTAGEN: Lexicon reached an agreement with Deltagen, Inc. providing for the settlement of Lexicon's claim in Deltagen's bankruptcy proceedings and the assumption by Deltagen of a sublicense agreement from Lexicon. Lexicon received an initial payment of \$4 million in connection with the settlement and may receive up to \$6 million in additional payments from Deltagen's net licensing revenues from existing lines of knockout mice and related phenotypic data. Lexicon will also be entitled to receive royalties on Deltagen's net licensing revenues from any lines of knockout mice that Deltagen may generate in the future.

LEXICON CONFERENCE CALL:

Dr. Arthur T. Sands, president and chief executive officer, and Julia P. Gregory, executive vice president, corporate development and chief financial officer, will host a conference call at 11:00 a.m. EDT on Thursday, April 28, 2005. They will review Lexicon's operating highlights and financial results for the three months ended March 31, 2005 and discuss the Company's expectations for the second quarter.

The dial-in number for the conference call is 800-946-0785 (within the United States) or 719-457-2661 (international). The pass code for all callers is 7476483. Investors can access www.lexicon-genetics.com to listen to a live webcast of the call. The webcast will be archived and available for review through May 3, 2005.

ABOUT LEXICON GENETICS

Lexicon Genetics is a biopharmaceutical company focused on the discovery and development of breakthrough treatments for human disease. Lexicon is systematically discovering the physiological and behavioral functions of genes to identify potential points of therapeutic intervention, or drug targets. Lexicon makes these discoveries using its proprietary gene knockout technology to model the

physiological effects that could be expected from prospective drugs directed against novel targets. The Company has advanced knockout-validated targets into drug discovery programs in six therapeutic areas: diabetes and obesity, cardiovascular disease, psychiatric and neurological disorders, cancer, immune system disorders and ophthalmic disease. Lexicon is working both independently and through strategic collaborations and alliances to accelerate the development and commercialization of its discoveries. Additional information about Lexicon is available through its corporate website, www.lexicon-genetics.com.

SAFE HARBOR STATEMENT

This press release contains "forward-looking statements," including statements about Lexicon's growth and future operating results, discovery and development of products, strategic alliances and intellectual property, as well as other matters that are not historical facts or information. These forward-looking statements are based on management's current assumptions and expectations and involve risks, uncertainties and other important factors, specifically including those relating to Lexicon's ability to successfully conduct preclinical development of its drug candidates and advance such candidates into clinical development, achieve its operational objectives, obtain patent protection for its discoveries and establish strategic alliances, as well as those relating to manufacturing, the regulatory process, intellectual property rights, and the therapeutic or commercial value of its drug candidates, that may cause Lexicon's actual results to be materially different from any future results expressed or implied by such forward-looking statements. Information identifying such important factors is contained under "Factors Affecting Forward-Looking Statements" and "Business - Risk Factors" in Lexicon's annual report on Form 10-K for the year ended December 31, 2004, as filed with the Securities and Exchange Commission. Lexicon undertakes no obligation to update or revise any such forward-looking statements, whether as a result of new information, future events or otherwise.

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LEXICON GENETICS INCORPORATED

SELECTED FINANCIAL DATA

CONSOLIDATED STATEMENTS OF OPERATIONS DATA THREE MONTHS ENDED MARCH 31, ----- (In thousands, except per share data) 2005 2004 -----
 --- (UNAUDITED) Revenues: Subscription and license fees..... \$ 5,042 \$ 3,548 Collaborative research..... 8,883 8,294 ----- Total revenues..... 13,925 11,842 Operating expenses: Research and development 22,760 22,401 General and administrative..... 4,432 5,044 ----- Total operating expenses..... 27,192 27,445 ----- Loss from operations..... (13,267) (15,603) Interest income..... 491 432 Interest expense..... (805) (291) Other income, net..... 315 (4) ----- Net loss \$ (13,266) \$ (15,466) ===== Net loss per common share, basic and diluted..... \$ (0.21) \$ (0.25) ===== Shares used in computing net loss per common share..... 63,525 63,065

----- CONSOLIDATED BALANCE SHEET DATA AS OF MARCH 31, AS OF DECEMBER 31, (In thousands)

2005 2004 ----- (UNAUDITED) Cash and investments, including restricted cash and investments of \$430..... \$ 70,739 \$ 87,558 Property and equipment, net..... 85,026 84,573 Goodwill..... 25,798 25,798 Intangible assets other than goodwill, net..... 1,540 1,840 Total assets..... 188,908 211,980 Deferred revenue..... 33,202 37,592 Current and long-term debt..... 37,453 37,631 Accumulated deficit..... (274,381) (261,115) Total stockholders' equity 108,399 121,594