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

FORM 10-Q

(MARK ONE)

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE QUARTERLY PERIOD ENDED MARCH 31, 2004

0R

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

FOR THE TRANSITION PERIOD FROM _____ TO _____

COMMISSION FILE NUMBER: 000-30111

LEXICON GENETICS INCORPORATED

(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE (STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION) 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)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes [X] No []

As of April 28, 2004, 63,337,622 shares of the registrant's common stock, par value \$0.001 per share, were outstanding.

TABLE OF CONTENTS

	PAG	iΕ
		-
FACTORS AFFECTING FORWARD-LOOKING STATEMENTS		
PART I - FINANCIAL INFORMATION		
Item 1. Financial Statements		
Consolidated Balance Sheets - March 31, 2004 (unaudited) and		5
Consolidated Statements of Operations (unaudited) - Three Mo		
March 31, 2004 and 2003		ŀ
Consolidated Statements of Cash Flows (unaudited) - Three Mo	onths Ended	
March 31, 2004 and 2003	5	j
Notes to Consolidated Financial Statements (unaudited)		j
Item 2. Management's Discussion and Analysis of Financial Condition	and	
Results of Operations	9	J
Item 3. Quantitative and Qualitative Disclosures About Market Risk.		
Item 4. Controls and Procedures		
PART II - OTHER INFORMATION		
Item 6. Exhibits and Reports on Form 8-K		
SIGNATURES		j –

The Lexicon name and logo, LexVision(R) and OmniBank(R) are registered trademarks and Genome5000(TM) and e-Biology(TM) are trademarks of Lexicon Genetics Incorporated.

FACTORS AFFECTING FORWARD LOOKING STATEMENTS

This quarterly report on Form 10-Q contains forward-looking statements. These statements relate to future events or our future financial performance. We have attempted to identify forward-looking statements by terminology including "anticipate," "believe," "can," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "should" or "will" or the negative of these terms or other comparable terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under "Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Factors," that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels or activity, performance or achievements expressed or implied by these forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We are not under any duty to update any of the forward-looking statements after the date of this quarterly report on Form 10-Q to conform these statements to actual results, unless required by law.

ITEM 1. FINANCIAL STATEMENTS

LEXICON GENETICS INCORPORATED

CONSOLIDATED BALANCE SHEETS (IN THOUSANDS, EXCEPT PAR VALUE)

	AS OF MARCH 31, 2004		2004 2003	
		AUDITED)		
ASSETS				
Current assets: Cash and cash equivalents Restricted cash Short-term investments, including restricted investments of	\$	51,192 56,963	\$	81,915 56,963
\$551 in 2004 and 2003 Accounts receivable, net of allowance for doubtful accounts		37,270		22,123
of \$109 for 2004 and 2003 Prepaid expenses and other current assets		3,181 3,444		6,571 3,933
Total current assets Property and equipment, net of accumulated depreciation		152,050		171,505
of \$34,732 and \$31,941, respectively Goodwill Intangible assets, net of amortization of \$3,260 and \$2,960, respectively Other assets		82,146 25,798 2,740 202		83,676 25,798 3,040 180
Total assets	\$	262,936	\$ ======	284,199
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities: Accounts payable Accrued liabilities Current portion of deferred revenue	\$	3,820 3,811 19,896	\$	5,884 4,757 21,125
Total current liabilities Deferred revenue, net of current portion Long-term debt Other long-term liabilities		27,527 22,857 56,344 3,426		31,766 26,567 56,344 3,306
Total liabilities		110,154		117,983
Commitments and contingencies				
Stockholders' equity: Preferred stock, \$.01 par value; 5,000 shares authorized; no shares issued and outstanding				
Common stock, \$.001 par value; 120,000 shares authorized; 63,326 and 62,827 shares issued and outstanding		63		63
Additional paid-in capital Deferred stock compensation Accumulated deficit		382,189 (61) (229,409)		380,995 (899) (213,943)
Total stockholders' equity		152,782		166,216
Total liabilities and stockholders' equity	\$	262,936	\$	284,199

The accompanying notes are an integral part of these financial statements.

LEXICON GENETICS INCORPORATED

CONSOLIDATED STATEMENTS OF OPERATIONS (IN THOUSANDS, EXCEPT PER SHARE AMOUNTS) (UNAUDITED)

	TI	HREE MONTHS E	ENDED M	ARCH 31,
		2004		2003
Revenues: Subscription and license fees Collaborative research	\$	3,548 8,294	\$	3,102 4,993 11
Compound libraries and other Total revenues Operating expenses: Paragraph and development including stock based		11,842		8,106
Research and development, including stock-based compensation of \$419 and \$1,270, respectively General and administrative, including stock-based compensation of \$411 and \$1,276, respectively		22,401 5,044		19,834 5,804
Total operating expenses		27,445		25,638
Loss from operations Interest and other income Interest expense		(15,603) 428 (291)		(17,532) 468 (81)
Net loss	\$	(15,466)	\$	(17,145)
Net loss per common share, basic and diluted Shares used in computing net loss per common share,	\$	(0.25)	\$	(0.33)
basic and diluted		63,065		52,371

The accompanying notes are an integral part of these financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS (IN THOUSANDS) (UNAUDITED)

	THREE MONTHS ENDED MARCH 31,								
		2004		2004		2004 2		2003	
Cash flows from operating activities: Net loss Adjustments to reconcile net loss to net cash used in operating activities:	\$	(15,466)	\$	(17,145)					
Depreciation Amortization of intangible assets, other than goodwill Amortization of deferred stock compensation Changes in operating assets and liabilities:		2,821 300 830		2,535 300 2,547					
Decrease in accounts receivable Decrease in prepaid expenses and other current assets (Increase) decrease in other assets Decrease in accounts payable and other liabilities Decrease in deferred revenue		3,390 489 (22) (2,890) (4,939)		1,334 303 513 (2,217) (3,007)					
Net cash used in operating activities Cash flows from investing activities: Purchases of property and equipment Increase in restricted cash Purchases of investments Maturities of investments		(15,487) (1,291) (18,983) 3,836		(14,837) (689) (15,344) (15,386) 46,054					
Net cash (used in) provided by investing activities Cash flows from financing activities: Proceeds from issuance of common stock		(16,438) 1,202		14,635 17					
Net cash provided by financing activities		1,202		17					
Net decrease in cash and cash equivalents Cash and cash equivalents at beginning of period		(30,723) 81,915		(185) 39,362					
Cash and cash equivalents at end of period	\$	51,192 ======	\$	39,177					
Supplemental disclosure of cash flow information: Cash paid for interest Supplemental disclosure of non-cash investing and financing activities:	\$	206	\$	1					
Deferred stock compensation, net of reversals Retirement of property and equipment	\$ \$	7 30	\$ \$	52					

The accompanying notes are an integral part of these financial statements.

LEXICON GENETICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

1. BASIS OF PRESENTATION

The accompanying unaudited consolidated financial statements of Lexicon Genetics Incorporated (Lexicon or the Company) have been prepared in accordance with generally accepted accounting principles for interim financial information and pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements.

In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included. Operating results for the three-month period ended March 31, 2004 are not necessarily indicative of the results that may be expected for the year ended December 31, 2004.

The accompanying consolidated financial statements include the accounts of Lexicon and its subsidiary. Intercompany transactions and balances are eliminated in consolidation.

For further information, refer to the financial statements and footnotes thereto included in Lexicon's annual report on Form 10-K for the year ended December 31, 2003, as filed with the SEC.

2. RESTRICTED CASH AND INVESTMENTS

Lexicon is required to maintain restricted cash or investments to collateralize borrowings made under the synthetic lease agreement under which it leases its office and laboratory facilities in The Woodlands, Texas (see Note 5), as well as to collateralize standby letters of credit for the leases on its office and laboratory facilities in East Windsor and Hopewell, New Jersey (see Note 6). As of March 31, 2004 and December 31, 2003, the Company maintained restricted cash and investments of \$57.5 million under these agreements. The Company refinanced the synthetic lease in April 2004 (See Note 7).

3. NET LOSS PER SHARE

Net loss per share is computed using the weighted average number of shares of common stock outstanding during the applicable period. Shares associated with stock options and warrants are not included because they are antidilutive. There are no differences between basic and diluted net loss per share for all periods presented.

4. STOCK-BASED COMPENSATION

Lexicon's stock-based compensation plans are accounted for under the recognition and measurement provisions of Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees, and Related Interpretations." Under the intrinsic value method described in APB Opinion No. 25, no compensation expense is recognized if the exercise price of the employee stock option equals the market price of the underlying stock on the date of grant. Lexicon recognized \$0.8 million and \$2.5 million of stock-based compensation during the three-month periods ended March 31, 2004 and 2003, respectively, which was primarily related to option grants made prior to Lexicon's April 2000 initial public offering. The following table illustrates the effect on net loss and net loss per share if the

fair value recognition provisions of Financial Accounting Standards Board (FASB) No. 123 "Accounting for Stock Based Compensation," had been applied to all outstanding and unvested awards in each period:

	Tł	REE MONTHS EN	DED MAI	RCH 31,
		2004		2003
Net loss, as reported Add: Stock-based employee compensation	\$	(15,466)	\$	(17,145)
expense included in reported net loss Deduct: Total stock-based employee compensation expense determined under fair value based method		830		2,546
for all awards		(4,882)		(6,443)
Pro forma net loss	\$ =====	(19,518)	\$ ====	(21,042)
Net loss per common share, basic and diluted				
As reported	\$ 	(0.25)	\$	(0.33)
Pro forma	\$ =====	(0.31)	\$ ====	(0.40)

5. DEBT OBLIGATIONS

Genentech Loan: On December 31, 2002, Lexicon borrowed \$4.0 million under a note agreement with Genentech, Inc. The proceeds of the loan are to be used to fund research efforts under the alliance agreement with Genentech. The note matures on December 31, 2005, but the Company may prepay it at any time. The Company may repay the note, at its option, in cash, in shares of common stock valued at the then-current market price, or in a combination of cash and shares, subject to certain limitations. The note accrues interest at an annual rate of 8%, compounded quarterly. The note is subordinated in right of payment to borrowings made under Lexicon's synthetic lease, which is discussed below.

Synthetic Lease Obligation: In October 2000, Lexicon entered into a synthetic lease agreement under which the lessor purchased the Company's existing laboratory and office buildings and animal facility in The Woodlands, Texas and agreed to fund the construction of additional facilities. Including the purchase price for the Company's existing facilities, the synthetic lease, as amended, provided funding of \$54.8 million in property and improvements. The term of the agreement is six years, which includes the construction period and a lease period. Lease payments for the new facilities began upon completion of construction, which occurred at the end of the first quarter of 2002. Lease payments are subject to fluctuation based on LIBOR rates. At the end of the lease term, the lease may be extended for one-year terms, up to seven additional terms, or the Company may purchase the properties for a price equal to the \$54.8 million funded under the synthetic lease for property and improvements plus the amount of any accrued but unpaid lease payments. If the Company elects not to renew the lease or purchase the properties, it may arrange for the sale of the properties to a third party or surrender the properties to the lessor. If the Company elects to arrange for the sale of the properties or surrender the properties to the lessor, it has guaranteed approximately 86% of the total original cost as the residual fair value of the properties. The Company is required to maintain restricted cash or investments to collateralize borrowings made under the synthetic lease agreement. In addition, Lexicon has agreed to maintain cash and investments of at least \$12.0 million in excess of the Company's restricted cash and investments. If the Company's cash and investments fall below that level, the Company may be required to seek a waiver of that agreement or to purchase the properties or arrange for their sale to a third party. Because the Company's cost to purchase the properties would not materially exceed the \$54.8 million funded under the synthetic lease for property and improvements and would likely be less than the amount of restricted cash and investments it is required to maintain under the synthetic lease, the Company believes that any requirement that it do so would not have a material adverse effect on its financial condition. As of March 31, 2004 and December 31, 2003, the Company maintained restricted cash and

investments of \$57.0 million to collateralize funding for property and improvements under the synthetic lease of \$54.8 million. Lexicon adopted Financial Accounting Standards Board Interpretation No. 46, or FIN 46, "Consolidation of Variable Interest Entities - An Interpretation of ARB No. 51" on December 31, 2003. Lexicon determined that the lessor under the synthetic lease is a variable interest entity as defined by FIN 46, and that the Company absorbs a majority of the variable interest entity's expected losses. Accordingly, the Company consolidated the variable interest entity. Subsequent to March 31, 2004, Lexicon purchased the facilities subject to the synthetic lease as discussed in Note 7.

6. COMMITMENTS AND CONTINGENCIES

Lexicon's subsidiary leases a 76,000 square-foot laboratory and office space in Hopewell, New Jersey under an agreement which expires in June 2013. The lease provides for an escalating yearly rent payment of \$1.3 million in the first year, \$2.1 million in years two and three, \$2.2 million in years four to six, \$2.3 million in years seven to nine and \$2.4 million in years ten and eleven. Lexicon is the guarantor of the obligations of its subsidiary under the lease. Lexicon's subsidiary leased a facility in East Windsor, New Jersey. The lease agreement expired in January 2004. The Company is required to maintain restricted investments to collateralize these leases. As of March 31, 2004, the Company had \$551,000 in restricted investments to collateralize standby letters of credit for these leases.

7. SUBSEQUENT EVENT

In April 2004, Lexicon purchased its facilities in The Woodlands from the lessor under the synthetic lease. In connection with such purchase, Lexicon repaid the \$54.8 million funded under the synthetic lease with proceeds from a \$34.0 million third-party mortgage financing and \$20.8 million in cash. The mortgage has a ten-year term with a 20-year amortization and bears interest at a fixed rate of 8.23%. As a result of the refinancing, all restrictions on the cash and investments that had secured the obligations under the synthetic lease were lifted, leaving a total of \$551,000 in restricted investments.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

We are a biopharmaceutical company focused on the discovery of breakthrough treatments for human disease. We are using gene knockout technology to systematically discover the physiological functions of genes in living mammals, or in vivo. We generate our gene function discoveries using knockout mice - mice whose DNA has been altered to disrupt, or "knock out," the function of the altered gene. Our patented gene trapping and gene targeting technologies enable us to rapidly generate these knockout mice by altering the DNA of genes in a special variety of mouse cells, called embryonic stem cells, which can be cloned and used to generate mice with the altered gene. We employ an integrated platform of advanced medical technologies to systematically discover and validate which genes, when knocked out, result in a favorable medical profile with pharmaceutical utility. We then pursue those genes and the proteins they encode as potential targets for therapeutic intervention in our drug discovery programs.

We employ internal resources and drug discovery alliances to discover potential small molecule drugs, therapeutic antibodies and therapeutic proteins for in vivo-validated drug targets that we consider to have high pharmaceutical value. We use our own sophisticated libraries of drug-like chemical compounds and an industrialized medicinal chemistry platform to identify small molecule drug candidates for our in vivo-validated drug targets. We have established alliances with Bristol-Myers Squibb Company to discover and develop novel small molecule drugs in the neuroscience field; Genentech, Inc. for the discovery of therapeutic proteins and antibody targets; with Abgenix, Inc. for the discovery and development of therapeutic antibodies based on our drug target discoveries; and with Incyte Corporation for the discovery and development of therapeutic proteins. In addition, we have established collaborations and license agreements with many other leading pharmaceutical and biotechnology companies under which we receive fees and, in many cases, are eligible to receive milestone and royalty payments, for access to some of our technologies and discoveries for use in their own drug discovery efforts.

We derive substantially all of our revenues from drug discovery alliances, subscriptions to our databases, target validation collaborations for the development and, in some cases, analysis of the physiological effects of genes altered in knockout mice, technology licenses and compound library sales. To date, we have generated a substantial portion of our revenues from a limited number of sources.

Our operating results and, in particular, our ability to generate additional revenues are dependent on many factors, including our success in establishing research collaborations and technology licenses, expirations of our research collaborations and database subscriptions, the success rate of our discovery efforts leading to opportunities for new research collaborations and licenses, as well as milestone payments and royalties, the timing and willingness of collaborators to commercialize products which may result in royalties, and general and industry-specific economic conditions which may affect research and development expenditures. Our future revenues from collaborations, alliances and database subscriptions are uncertain because our existing agreements have fixed terms or relate to specific projects of limited duration. Our future revenues from technology licenses are uncertain because they depend, in large part, on securing new agreements. Subject to limited exceptions, we do not intend to offer subscriptions to our databases or continue to make our compound libraries available for purchase in the future. Our ability to secure future revenue-generating agreements will depend upon our ability to address the needs of our potential future collaborators and licensees, and to negotiate agreements that we believe are in our long-term best interests. We may determine that our interests are better served by retaining rights to our discoveries and advancing our therapeutic programs to a later stage, which could limit our near-term

revenues. Because of these and other factors, our quarterly operating results have fluctuated in the past and are likely to do so in the future, and we do not believe that quarter-to-quarter comparisons of our operating results are a good indication of our future performance.

Since our inception, we have incurred significant losses and, as of March 31, 2004, we had an accumulated deficit of \$229.4 million. Our losses have resulted principally from costs incurred in research and development, general and administrative costs associated with our operations, and non-cash stock-based compensation expenses associated with stock options granted to employees and consultants prior to our April 2000 initial public offering. Research and development expenses consist primarily of salaries and related personnel costs, material costs, facility costs, depreciation on property and equipment, legal expenses resulting from intellectual property prosecution and other expenses related to our drug discovery and LexVision programs, the development and analysis of knockout mice and our other target validation research efforts, and the development of compound libraries. General and administrative expenses consist primarily of salaries and related expenses for executive, finance and other administrative personnel, professional fees and other corporate expenses including business development and general legal activities. In connection with the expansion of our drug discovery programs and our target validation research efforts, we expect to incur increasing research and development costs. As a result, we will need to generate significantly higher revenues to achieve profitability.

CRITICAL ACCOUNTING POLICIES

Revenue Recognition

We recognize revenues when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed and determinable, and collectibility is reasonably assured. Payments received in advance under these arrangements are recorded as deferred revenue until earned.

Fees for access to our databases and other target validation resources are recognized ratably over the subscription or access period. Payments received under target validation collaborations are recognized as revenue as we perform our obligations related to such research to the extent such fees are non-refundable. Non-refundable upfront fees and annual research funding under our drug discovery alliances are recognized as revenue on a straight-line basis over the estimated period of service, generally the contractual research term. Milestone-based fees are recognized upon completion of specified milestones according to contract terms. Non-refundable technology license fees are recognized as revenue upon the grant of the license, when performance is complete and there is no continuing involvement.

Revenues recognized from multiple element contracts are allocated to each element of the arrangement based on the relative fair value of the elements. The determination of fair value of each element is based on objective evidence. When revenues for an element are specifically tied to a separate earnings process, revenue is recognized when the specific performance obligation associated with the element is completed. When revenues for an element are not specifically tied to a separate earnings process, they are recognized ratably over the term of the agreement.

A change in our revenue recognition policy or changes in the terms of contracts under which we recognize revenues could have an impact on the amount and timing of our recognition of revenues.

Research and Development Expenses

Research and development expenses consist of costs incurred for company-sponsored as well as collaborative research and development activities. These costs include direct and research-related

overhead expenses and are expensed as incurred. Patent costs and technology license fees for technologies that are utilized in research and development and have no alternative future use are expensed when incurred.

Prior to preclinical development work, we are unable to segregate the costs related to research performed on drug candidates because the drug candidate is often not specifically identified until the later stages of our research. When we begin the formal preclinical process in preparation for filing an IND, we intend to account on a program by program basis for the costs related to the development of the identified candidate. To date, we have not advanced any drug products into formal preclinical development.

Goodwill Impairment

Goodwill is not amortized, but is tested at least annually for impairment at the reporting unit level. We have determined that the reporting unit is the single operating segment disclosed in our current financial statements. Impairment is the condition that exists when the carrying amount of goodwill exceeds its implied fair value. The first step in the impairment process is to determine the fair value of the reporting unit and then compare it to the carrying value, including goodwill. We determined that the market capitalization approach is the most appropriate method of measuring fair value of the reporting unit. Under this approach, fair value is calculated as the average closing price of our common stock for the 30 days preceding the date that the annual impairment test is performed, multiplied by the number of outstanding shares on that date. A control premium, which is representative of premiums paid in the marketplace to acquire a controlling interest in a company, is then added to the market capitalization to determine the fair value of the reporting unit. If the fair value exceeds the carrying value, no further action is required and no impairment loss is recognized. Additional impairment assessments may be performed on an interim basis if we encounter events or changes in circumstances that would indicate that, more likely than not, the carrying value of goodwill has been impaired.

RESULTS OF OPERATIONS

Three Months Ended March 31, 2004 and 2003

Revenues. Total revenues and dollar and percentage changes as compared to the corresponding period in the prior year are as follows (dollar amounts are presented in millions):

	THREE MONTHS ENDED	MARCH 31
	2004	2003
Total revenues Dollar increase Percentage increase	\$ 3.7	\$ 8.1

- Subscription and license fees Revenue from subscriptions and license fees increased 14% to \$3.5 million due to increased technology license fees.
- Collaborative research Revenue from collaborative research increased 66% to \$8.3 million primarily due to increased revenue under our neuroscience alliance with Bristol-Myers Squibb Company, which was entered into in December 2003. This was offset in part by a decrease in revenues from target validation collaborations due to the scheduled conclusion of many of these arrangements.

Research and Development Expenses. Research and development expenses and dollar and percentage changes as compared to the corresponding period in the prior year are as follows (dollar amounts are presented in millions):

	THREE MONTHS ENDED	MARCH 31,		
	2004	2003		
Total research and development expense Dollar increase Percentage increase	\$ 2.6	\$ 19.8		

Research and development expenses consist primarily of salaries and other personnel-related expenses, stock-based compensation expenses, laboratory supplies, facility and equipment costs, consulting and other services. The change in 2004 as compared to 2003 resulted primarily from the following costs:

- Personnel Personnel costs increased 23% to \$10.4 million primarily due to increased personnel to support the expansion of our drug discovery programs, merit-based pay increases for employees and increasing employee benefit costs. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.
- Stock-based compensation Stock based compensation expense, primarily relating to option grants made prior to our April 2000 initial public offering, decreased 67% to \$0.4 million. All deferred stock compensation relating to these options was fully amortized as of January 31, 2004 when these options became fully vested.
- Laboratory supplies Laboratory supplies expense increased 36% to \$3.5 million due primarily to increased purchases of media and compounds related to our drug discovery activities.
- Facilities and equipment Facilities and equipment costs increased 5% to \$5.1 million primarily due to depreciation expense on our facilities in The Woodlands, Texas. On December 31, 2003, we consolidated the lessor under our synthetic lease related to these facilities. Accordingly, depreciation expense on those facilities is now included in our operating expenses.
- Consulting and other services Consulting and other services increased 7% to \$1.8 million primarily due to third-party research costs. Consulting and other services include subscriptions to third-party databases, technology licenses, legal and patent fees and third-party research.
- Other Other costs increased by 17% to \$1.2 million.

General and Administrative Expenses. General and administrative expenses and dollar and percentage changes as compared to the corresponding period in the prior year are as follows (dollar amounts are presented in millions):

	THE	REE MONTHS	ENDED	MAR	CH 31,
		2004		2003	
Total general and administrative expense. Dollar decrease Percentage decrease		5.0 0.8 13%		\$	5.8

General and administrative expenses consist primarily of personnel costs to support our research activities, stock-based compensation expense, facility and equipment costs and professional fees, such as legal fees. The change in 2004 as compared to 2003 resulted primarily from the following costs:

- Personnel Personnel costs increased 3% to \$2.9 million primarily due to merit-based pay increases and increased employee benefit costs. Salaries, bonuses, employee benefits, payroll taxes, recruiting and relocation costs are included in personnel costs.
- Stock-based compensation Stock based compensation expense, primarily relating to option grants made prior to our April 2000 initial public offering, decreased 68% to \$0.4 million. All deferred stock compensation relating to these options was fully amortized as of January 31, 2004 when these options became fully vested.
- Facilities and equipment Facilities and equipment costs decreased 13% to \$0.8 million.
- Professional fees Professional fees increased 31% to 0.3 million.
- Other Other costs increased 12% to \$0.6 million.

Interest and Other Income. Interest and other income decreased to \$0.4 million in the three months ended March 31, 2004 from \$0.5 million in the corresponding period in 2003.

Net Loss and Net Loss Per Common Share. Net loss decreased to \$15.5 million in the three months ended March 31, 2004 from \$17.1 million in the corresponding period in 2003. Net loss per common share decreased to \$0.25 in the three months ended March 31, 2004 from \$0.33 in the corresponding period in 2003. Net loss includes stock-based compensation expense of \$0.8 million and \$2.5 million in the three months ended March 31, 2004 and 2003, respectively.

Our quarterly operating results have fluctuated in the past and are likely to do so in the future, and we believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance.

LIQUIDITY AND CAPITAL RESOURCES

We have financed our operations from inception primarily through sales of common and preferred stock, contract and milestone payments to us under our collaboration, license and database subscription agreements, equipment financing arrangements and leasing arrangements. From our inception through March 31, 2004, we had received net proceeds of \$294.3 million from issuances of common and preferred stock, including \$203.2 million of net proceeds from the initial public offering of our common stock in April 2000 and \$50.1 million from our July 2003 common stock offering. In addition, from our inception through March 31, 2004, we received \$182.5 million in cash payments from database subscription and technology license fees, drug discovery alliances, target validation collaborations, sales of compound libraries and reagents, and government grants, of which \$143.2 million had been recognized as revenues through March 31, 2004.

As of March 31, 2004, we had \$145.4 million in cash, cash equivalents and short-term investments (including \$57.5 million of restricted cash and investments), as compared to \$161.0 million (including \$57.5 million of restricted cash and investments) as of December 31, 2003. We used cash of \$15.5 million in operations in the three months ended March 31, 2004. This consisted primarily of the net loss for the period of \$15.5 million offset by non-cash charges of \$2.8 million related to depreciation expense, \$0.8 million related to stock-based compensation expense, and \$0.3 million related to

amortization of intangible assets other than goodwill; a \$4.9 million decrease in deferred revenue; and changes in other operating assets and liabilities of \$1.0 million. Investing activities used cash of \$16.4 million in the three months ended March 31, 2004, principally as a result of net purchases of short-term investments. We received cash of \$1.2 million in financing activities consisting of proceeds from stock option exercises.

In October 2000, we entered into a synthetic lease agreement under which the lessor purchased our existing laboratory and office buildings and animal facility in The Woodlands, Texas and agreed to fund the construction of additional facilities. Including the purchase price for our existing facilities, the synthetic lease, as amended, provided funding of \$54.8 million in property and improvements. We consolidated the lessor under our synthetic lease upon adoption of Financial Accounting Standards Board Interpretation No. 46 on December 31, 2003. In April 2004, we purchased our facilities in The Woodlands from the lessor under the synthetic lease. In connection with such purchase, we repaid the \$54.8 million funded under the synthetic lease with proceeds from a \$34.0 million third-party mortgage financing and \$20.8 million in cash. The mortgage has a ten-year term with a 20-year amortization and bears interest at a fixed rate of 8.23%. As a result of the refinancing, all restrictions on the cash and investments that had secured our obligations under the synthetic lease were eliminated, leaving a total of \$551,000 in restricted investments related to our New Jersey facilities.

In May 2002, our subsidiary Lexicon Pharmaceuticals (New Jersey), Inc. signed a ten-year lease for a 76,000 square-foot facility in Hopewell, New Jersey. The term of the lease extends until June 30, 2013. The lease provides for an escalating yearly base rent payment of \$1.3 million in the first year, \$2.1 million in years two and three, \$2.2 million in years four to six, \$2.3 million in years seven to nine and \$2.4 million in years ten and eleven. We are the guarantor of the obligations of our subsidiary under the lease.

In December 2002, we borrowed \$4.0 million under a note agreement with Genentech. The proceeds of the loan are to be used to fund research efforts under our alliance with Genentech for the discovery of therapeutic proteins and antibody targets. The note matures on or before December 31, 2005, but we may prepay it at any time. We may repay the note, at our option, in cash, in shares of our common stock valued at the then-current market value, or in a combination of cash and shares, subject to certain limitations. The note accrues interest at an annual rate of 8%, compounded quarterly.

Our future capital requirements will be substantial and will depend on many factors, including our ability to obtain alliance, collaboration and technology license agreements, the amount and timing of payments under such agreements, the level and timing of our research and development expenditures, market acceptance of our products, the resources we devote to developing and supporting our products and other factors. Our capital requirements will also be affected by any expenditures we make in connection with license agreements and acquisitions of and investments in complementary technologies and businesses. We expect to devote substantial capital resources to continue our research and development efforts, to expand our support and product development activities, and for other general corporate activities. We believe that our current unrestricted cash and investment balances and revenues we expect to derive from drug discovery alliances, technology licenses and target validation collaborations will be sufficient to fund our operations at least through the next two years. During or after this period, if cash generated by operations is insufficient to satisfy our liquidity requirements, we will need to sell additional equity or debt securities or obtain additional credit arrangements. Additional financing may not be available on terms acceptable to us or at all. The sale of additional equity or convertible debt securities may result in additional dilution to our stockholders.

DISCLOSURE ABOUT MARKET RISK

We are exposed to limited market and credit risk on our cash equivalents, which have maturities of three months or less at the time of purchase. We maintain a short-term investment portfolio which consists of U.S. government agency debt obligations, investment grade commercial paper, corporate debt securities and certificates of deposit that mature within twelve months, which we believe are subject to limited market and credit risk. We currently do not hedge interest rate exposure or hold any derivative financial instruments in our investment portfolio.

We have operated primarily in the United States and substantially all sales to date have been made in U.S. dollars. Accordingly, we have not had any material exposure to foreign currency rate fluctuations.

RISK FACTORS

Our business is subject to certain risks and uncertainties, including those referenced below:

Risks Related to Our Business

- we have a history of net losses, and we expect to continue to incur net losses and may not achieve or maintain profitability
- we will need additional capital in the future and, if it is not available, we will have to curtail or cease operations
- any sale of additional equity securities in the future may be dilutive to our stockholders
- we are an early-stage company, and we may not successfully develop or commercialize any therapeutics or drug targets that we have identified
- we face substantial competition in the discovery of the DNA sequences of genes and their functions and in our drug discovery and product development efforts
- we rely heavily on our collaborators to develop and commercialize pharmaceutical products based on genes that we identify as promising candidates for development as drug targets and our collaborators' efforts may fail to yield pharmaceutical products on a timely basis, if at all
- we rely on several key collaborators for a significant portion of our revenues, the loss of any of which would negatively impact our business to the extent such losses are not offset by additional collaborators
- cancellations by or conflicts with our collaborators could harm our business
- we may be unsuccessful in developing and commercializing pharmaceutical products on our own
- we lack the capability to manufacture compounds for preclinical studies, clinical trials or commercial sales and will rely on third parties to manufacture our potential products, which may harm or delay our product development and commercialization efforts
- we may engage in future acquisitions, which may be expensive and time consuming and from which we may not realize anticipated benefits

- if we lose our key personnel or are unable to attract and retain additional personnel, we may be unable to pursue collaborations or develop our own products
- because all of our target validation operations are located at a single facility, the occurrence of a disaster could significantly disrupt our business
- our quarterly operating results have been and likely will continue to fluctuate, and we believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance

Risks Related to Our Industry

- our ability to patent our inventions is uncertain because patent laws and their interpretation are highly uncertain and subject to change
- our patent applications may not result in enforceable patent rights and, as a result, the protection afforded to our scientific discoveries may be insufficient
- if other companies and institutions obtain patents relating to our drug target or product candidate discoveries, we may be unable to obtain patents for our inventions based upon those discoveries and may be blocked from using or developing some of our technologies and products
- issued or pending patents may not fully protect our discoveries, and our competitors may be able to commercialize technologies or products similar to those covered by our issued or pending patents
- we may be involved in patent litigation and other disputes regarding intellectual property rights and may require licenses from third parties for our discovery and development and planned commercialization activities, and we may not prevail in any such litigation or other dispute or be able to obtain required licenses
- we use intellectual property that we license from third parties, and if we do not comply with these licenses, we could lose our rights under them
- we have not sought patent protection outside of the United States for some of our inventions, and some of our licensed patents only provide coverage in the United States, and as a result, our international competitors could be granted foreign patent protection with respect to our discoveries
- we may be unable to protect our trade secrets
- our efforts to discover, evaluate and validate potential targets for drug intervention and our drug discovery programs are subject to evolving data and other risks inherent in the drug discovery process
- our industry is subject to extensive and uncertain government regulatory requirements, which could significantly hinder our ability, or the ability of our collaborators, to obtain, in a timely manner or at all, government approval of products based on genes that we identify, or to commercialize such products
- if our potential products receive regulatory approval, we or our collaborators will remain subject to extensive and rigorous ongoing regulation

- the uncertainty of pharmaceutical pricing and reimbursement may decrease the commercial potential of any products that we or our collaborators may develop and affect our ability to raise capital
- we use hazardous chemicals and radioactive and biological materials in our business; any disputes relating to improper handling, storage or disposal of these materials could be time consuming and costly
- we may be sued for product liability
- public perception of ethical and social issues may limit or discourage the use of our technologies, which could reduce our revenues

For additional discussion of the risks and uncertainties that affect our business, see "Item 1. Business - Risk Factors" included in our annual report on Form 10-K for the year ended December 31, 2003, as filed with the Securities and Exchange Commission.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See "Disclosure about Market Risk" under "Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations" for quantitative and qualitative disclosures about market risk.

ITEM 4. CONTROLS AND PROCEDURES

Lexicon's chief executive officer and chief financial officer have concluded that the Company's disclosure controls and procedures (as defined in Securities Exchange Act of 1934 (the "Exchange Act") Rules 13a-15(e) and 15d-15(e)) are sufficiently effective to ensure that the information required to be disclosed by the Company in the reports it files under the Exchange Act is gathered, analyzed and disclosed with adequate timeliness, accuracy and completeness, based on an evaluation of such controls and procedures conducted within 90 days prior to the date hereof.

Subsequent to the Company's evaluation, there were no significant changes in internal controls or other factors that could significantly affect internal controls, including any corrective actions with regard to significant deficiencies and material weaknesses.

PART II OTHER INFORMATION

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

(a) Exhibits

EXHIBIT NO.	DESCRIPTION
10.1	Consulting Agreement with Alan S. Nies, M.D. dated February 19, 2003, as amended
31.1	Certification of CEO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of CFO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

On February 19, 2004, we filed a Current Report on Form 8-K dated February 19, 2004 relating to our issuance of a press release reporting our financial results for the quarter and year ended December 31, 2003, which press release included our consolidated balance sheet data and consolidated statements of operations data for the periods.

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 30, 2004	By: /s/ ARTHUR T. SANDS
		Arthur T. Sands, M.D., Ph.D. President and Chief Executive Officer
Date:	April 30, 2004	By: /s/ JULIA P. GREGORY
		Julia P. Gregory Executive Vice President, Corporate Development and Chief Financial Officer
		19

INDEX TO EXHIBITS

EXHIBIT NO.	DESCRIPTION
10.1	Consulting Agreement with Alan S. Nies, M.D. dated February 19, 2003, as amended
31.1	Certification of CEO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of CFO Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of CEO and CFO Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

February 19, 2003

Dr. Alan S. Nies

Dear Alan:

We are pleased to invite you to become the Chairman of the Medical Advisory Board of, and a special consultant to, Lexicon Genetics Incorporated (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 in those capacities, as set forth below.

1. Consulting Services. As the Chairman of the Medical Advisory Board of, and a special consultant to, Lexicon, 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, relating to: (i) evaluation of the Company's drug discovery programs; (ii) establishment of strategies for clinical development of potential products arising from such programs; (iii) identification and, as appropriate, recruitment or engagement of key personnel, consultants and service providers to oversee and conduct the Company's clinical development efforts; (iv) evaluation of the clinical development potential of in-licensing and acquisition candidates; (v) provision of assistance and advice relating to the establishment of drug discovery collaborations and alliances; and (vi) such other consulting and advisory services relating to the Company's clinical development efforts as you and the Company may agree. You will devote up to 24 days annually (approximately two days a month on average) 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. Compensation. As full consideration for your services as Chairman of the Medical Advisory Board of, and a special consultant to, the Company and your obligations under this Agreement, you will receive fees of \$75,000 per year, payable in 12 monthly installments. 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. Stock Option. In further consideration for your services as Chairman of the Medical Advisory Board of, and a special consultant to, the Company and your obligations under this Agreement, the Company will grant you an option under its 2000 Equity Incentive Plan (the "Plan") to purchase 2,500 shares of the Company's common stock at a purchase price per share equal to the fair market value of the common stock, determined in accordance with the Plan, on the date your service in such capacities commences, such options vesting at a rate of one-fourth of the total amount for each year of service to the Company hereunder. Such option grant shall be evidenced by a separate stock option agreement and governed by the terms of such agreement and the Plan.

4. Confidential Information.

In the course of your service as Chairman of the (a) Medical Advisory Board of, and a special 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, 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.

5. Inventions and Discoveries.

(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 as Chairman of the Medical Advisory Board of, and a special consultant to, the Company, 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.

6. Conflicting Engagements.

During your service as Chairman of the Medical (a) Advisory Board of, and a special consultant to, the Company, you agree that you will not, without previously notifying the Company in writing, directly or indirectly, whether alone or in association with others, in the United States of America or in any foreign nation, state or jurisdiction, become associated with, render advisory, consulting or other services to, or become employed by any other person or entity (collectively referred to as "Third Party Competitors") engaging in clinical development of a drug in direct conflict or competition with a drug development program being conducted by the Company. You agree to disclose to the Company any proposed relationship with a Third Party Competitor (a "Proposed Relationship") at least 60 days prior to the establishment of a confidential relationship between you and such Third Party Competitor. Upon such disclosure, the Company may consent to the Proposed Relationship in writing, may proffer written consent subject to condition precedent regarding certain restrictions on the scope and/or field of the Proposed Relationship, or may terminate this Agreement.

(b) Subject to your obligations with respect to Confidentiality and Intellectual Property under Sections 4 and 5 of this Agreement, nothing in this Agreement shall prohibit you from continuing your duties under any consulting or advisory agreement that predates this Agreement, and which has been disclosed to the Company in writing prior to the effective date of this Agreement.

7. Term and Termination. You will render your advisory and consulting services to the Company and serve as Chairman of the Company's Medical Advisory Board for an initial period of one year commencing upon the date of your signature accepting the provisions of this Agreement on the signature page. The term of this Agreement shall be automatically renewed for additional one-year terms on each anniversary unless either party gives 30 days' advance written notice of non-renewal. This Agreement may be terminated (i) at any time by either party, with or without cause, upon 30 days' advance written notice to the other party and (ii) by either party for breach of this Agreement by the other party that, where curable, is not cured within 10 business days after written notice of such breach is delivered to the breaching party.

8. Independent Contractor. 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.

9. Reference to Affiliation. The Company may reference your service as Chairman of the Company's Medical Advisory Board, but will not otherwise use your name without your prior written consent.

10. Compliance with Laws and Procedures. 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.

11. Governing Law. 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.

12. Enforcement. 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.

13. Survival of Terms. The provisions of Sections 4, 5 and 11 through 19 hereof shall survive termination of this Agreement.

14. Successors and Assigns. 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.

15. Severability. 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.

16. Entire Agreement. 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.

17. Amendment and Waiver. 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.

18. No Conflict. 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.

19. Construction. 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, whereupon this Agreement shall constitute a binding contract between us and our legal representatives, successors, and assigns.

Very truly yours,

LEXICON GENETICS INCORPORATED

By: /s/ Arthur T. Sands

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

ACCEPTED AND AGREED TO ON THE DATE SET FORTH BELOW:

By: /s/ Alan S. Nies Alan S. Nies, M.D.

Date: February 24, 2003

June 24, 2003

Dr. Alan S. Nies

Dear Alan:

This letter serves as the consent of Lexicon Genetics Incorporated (the "Company") to the assignment of your rights and obligations under that certain letter agreement dated February 19, 2003 between you and Lexicon (the "Agreement") to Nies Consulting LP (the "Partnership").

As a condition to the foregoing assignment, you agree that you will personally provide all consulting and advisory services on behalf of the Partnership and that you remain individually bound by Sections 4 (Confidentiality), 5 (Inventions and Discoveries) and 6 (Conflicting Engagements) of the 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.

Very truly yours,

LEXICON GENETICS INCORPORATED

By: /s/ Arthur T. Sands Arthur T. Sands, M.D., Ph.D.

President and Chief Executive Officer

ACCEPTED AND AGREED TO ON THE DATE SET FORTH BELOW:

By: /s/ Alan S. Nies Alan S. Nies, M.D.

Date: June 25, 2003

I, Arthur T. Sands, certify that:

- I have reviewed this Quarterly Report on Form 10-Q of Lexicon Genetics Incorporated;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
 - evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - c) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 30, 2004

/s/ Arthur T. Sands

Arthur T. Sands, M.D., Ph.D. President and Chief Executive Officer I, Julia P. Gregory, certify that:

- 1. I have reviewed this Quarterly Report on Form 10-Q of Lexicon Genetics Incorporated;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- з. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- The registrant's other certifying officers and I are responsible for 4. establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;
 - b) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - disclosed in this report any change in the registrant's internal c) control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
- The registrant's other certifying officers and I have disclosed, based 5 on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - all significant deficiencies and material weaknesses in the design a) or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - any fraud, whether or not material, that involves management or b) other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 30, 2004

/s/ Julia P. Gregory

----Julia P. Gregory Executive Vice President, Corporate Development and Chief Financial Officer

.

CERTIFICATION

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350, as adopted), Arthur T. Sands, M.D., Ph.D., Chief Executive Officer of Lexicon Genetics Incorporated ("Lexicon"), and Julia P. Gregory, Chief Financial Officer of Lexicon, each hereby certify that:

- Lexicon's Quarterly Report on Form 10-Q for the period ended March 31, 2004, and to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of section 13(a) or section 15(d) of the Securities Exchange Act of 1934, and
- 2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of Lexicon.

IN WITNESS WHEREOF, the undersigned have set their hands hereto as of the 30th day of April, 2004.

By: /s/ ARTHUR T. SANDS Arthur T. Sands, M.D., Ph.D. President and Chief Executive Officer

By: /s/ JULIA P. GREGORY

Julia P. Gregory Executive Vice President, Corporate Development and Chief Financial Officer