AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON APRIL 6, 2000

REGISTRATION NO. 333-96469

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

AMENDMENT NO. 4

TO
FORM S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

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

DELAWARE	8731	76-0474169
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE NUMBER)	(I.R.S. EMPLOYER IDENTIFICATION NUMBER)

4000 RESEARCH FOREST DRIVE
THE WOODLANDS, TEXAS 77381
(281) 364-0100
(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

ARTHUR T. SANDS, M.D., PH.D.
PRESIDENT AND CHIEF EXECUTIVE OFFICER
4000 RESEARCH FOREST DRIVE
THE WOODLANDS, TEXAS 77381
(281) 364-0100
(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF AGENT FOR SERVICE)

COPIES TO:

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ANDREWS & KURTH L.L.P.	CAHILL GORDON & REINDEL
600 TRAVIS, SUITE 4200	80 PINE STREET
HOUSTON, TEXAS 77002	NEW YORK, NEW YORK 10005
(713) 220-4200	(212) 701-3000

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC:
As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. [ ]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If delivery of the Prospectus is expected to be made pursuant to Rule 434, please check the following box. [ ]

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT THAT SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION

DATED APRIL 6, 2000

PROSPECTUS

10,000,000 Shares

[LEXICON LOGO]

LEXICON GENETICS INCORPORATED

Common Stock

Lexicon Genetics Incorporated is selling all of the shares of common stock in this offering. This is our initial public offering. We estimate that the initial offering price will be between $22.00 and $24.00 per share.

Our shares of common stock have been approved for quotation on the Nasdaq National Market under the symbol "LEXG".

INVESTING IN OUR COMMON STOCK INVOLVES RISKS. PLEASE READ "RISK FACTORS" BEGINNING ON PAGE 7.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	PRICE TO PUBLIC	UNDERWRITING DISCOUNT	PROCEEDS TO LEXICON
Per Share	$	$	$
Total	$	$	$

We have granted the underwriters the rights to purchase up to an additional 1,500,000 shares of common stock to cover over-allotments.

Joint Lead Managers

J.P. MORGAN & CO. CREDIT SUISSE FIRST BOSTON

CIBC WORLD MARKETS PUNK, ZIEGEL & COMPANY

, 2000

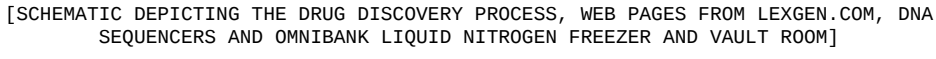
[SCHEMATIC DEPICTING THE DRUG DISCOVERY PROCESS, WEB PAGES FROM LEXGEN.COM, DNA
SEQUENCERS AND OMNIBANK LIQUID NITROGEN FREEZER AND VAULT ROOM]

TABLE OF CONTENTS

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before buying shares of our common stock. You should read the entire prospectus carefully.

LEXICON GENETICS INCORPORATED

We are using technology that we invented to define the functions of genes for drug discovery. This technology, which we refer to as gene trapping, alters the DNA of genes in a special variety of mouse cells, called embryonic stem (ES) cells, which can be cloned and used to generate mice. In these mice, the altered DNA disrupts, or "knocks out," the function of the gene, enabling the study of the function of the knocked out gene. Our gene trapping technology also enables us to obtain DNA sequences of genes from human and mouse cells. Using this technology, we are discovering thousands of genes and expanding our OmniBank library of tens of thousands of knockout mouse clones.

We have established an Internet exchange, Lexgen.com, to enable researchers worldwide to access our OmniBank library and to form collaborations with us to discover pharmaceutical products based on genomics - the study of genes and their function. Through our ongoing collaborations with pharmaceutical companies, biotechnology companies and academic researchers, we receive fees and may obtain royalties and milestone payments from commercialization of pharmaceutical products developed using our genomics technologies. We believe that providing global access to our OmniBank library through the Internet will significantly accelerate genomics research and will enable us to establish a leadership position in the discovery of drug targets and proteins which can themselves be used as drugs, commonly called therapeutic proteins.

Our gene trapping technology captures gene sequence information and enables us to:

- obtain DNA sequences of genes that operate, or are expressed, infrequently or at very low levels;
- identify genes contained within the DNA sequence of the chromosome;
- obtain DNA sequence of genes throughout the human genome at a fraction of the cost of traditional approaches; and
- create a library of knockout mice for the discovery of gene function.

We have created three key genomics resources, which we are continuing to expand for drug discovery:

- Our OmniBank database and mouse clone library, which presently contains more than 70,000 embryonic stem (ES) cell clones stored in liquid nitrogen freezers and identified by DNA sequence in a searchable database. Each OmniBank ES cell clone can be grown into a knockout mouse for functional genomics research - the study of gene function.
- Our Human Gene Trap database, which presently contains DNA sequence from approximately 50,000 human genes that we have rapidly and efficiently trapped from human chromosomes and analyzed in a database. We believe that, at present, approximately 50% of the gene sequences contained in our Human Gene Trap database are not represented in public gene sequence databases. We are using this resource to obtain full-length gene sequence information for drug discovery.
- Lexgen.com, a genomics Internet exchange through which researchers at pharmaceutical and biotechnology companies and academic institutions worldwide subscribe to our OmniBank database to conduct web-based, computer or bioinformatics, analysis of genes, acquire knockout mouse clones and determine the function of genes with us under our e-Biology collaboration program.

We believe that collaborations are an effective way to conduct research and development of pharmaceutical product opportunities created by our genomics technologies. Our collaborations are typically non-exclusive arrangements, and we retain the ability to pursue future applications of our technologies. Since September 1999, we have established collaborations with, among others, Millennium Pharmaceuticals, Inc., the R.W. Johnson Pharmaceutical Research Institute (a subsidiary of Johnson & Johnson), G.D. Searle & Co., Boehringer Ingelheim Pharmaceuticals, Inc. and N.V. Organon. We may also pursue development of selected drug targets and therapeutic proteins on our own.

GENOMICS: CHALLENGE AND OPPORTUNITY

Genomics represents an opportunity for the development of drugs that address medical needs for which there are presently no effective treatments, as well as drugs that are more effective or have fewer side effects than the treatments that are currently available. Most drugs on the market today interact with a total of about 500 specific protein targets, each of which is encoded by a gene. While estimates of the total number of potential drug targets encoded within the human genome vary, many experts

believe that genomics research could discover between 5,000 and 10,000 new targets for pharmaceutical development. Consequently, genomics represents a significant opportunity for those companies with the key technologies that can efficiently discover the most promising genes for drug discovery.

Large numbers of genes with little functional information can present a major challenge to traditional drug discovery research. We believe that the solution to this challenge requires redefining the way drug discovery is conducted by systematically determining the function of large numbers of genes in animal models to discover novel drug targets and therapeutic proteins. We believe our technologies for discovering DNA sequences and the functions of genes, together with our e-Biology collaboration program, provide significant opportunities for us and our collaborators to discover and develop drugs more successfully than those companies that utilize traditional methods.

STRATEGY

Our principal objective is to establish a leadership position in drug target and therapeutic protein discovery. The key elements of our strategy include the following:

- discover and obtain proprietary rights to a substantial number of human genes using our gene trapping technology;

- expand our library of knockout mice using our gene trapping technology and create custom knockout mice using our gene targeting technology;

- use the Internet to establish gene function discovery collaborations based on knockout mice with researchers at pharmaceutical companies, biotechnology companies and academic institutions;

- discover the functions of large numbers of genes that encode potential drug targets and therapeutic proteins through internal research programs using knockout mice; and

- develop promising drug candidates through collaborations or with our own resources.

CORPORATE INFORMATION

Lexicon Genetics was incorporated in Delaware in July 1995, and commenced operations in September 1995. Our corporate headquarters are located at 4000 Research Forest Drive, The Woodlands, Texas 77381, and our telephone number is (281) 364-0100. Our Internet exchange is located at www.Lexgen.com and our corporate website is located at www.lexicon-genetics.com. We do not intend for information found on our Internet exchange and our website to be part of this prospectus. We own or have rights to various copyrights, trademarks and trade names used in our business, including the Lexicon Genetics name and logo, OmniBank(R), LexGene(TM), Lexgen.com(TM), Internet Now(TM), Internet Universal(TM), S-T-V(TM) and e-Biology(TM).

THE OFFERING

The following information reflects 24,781,059 shares of common stock outstanding as of March 15, 2000 and the conversion of all our outstanding convertible preferred stock into 12,733,992 shares of common stock upon the closing of this offering. The number of outstanding shares of common stock does not include:

- 8,473,134 shares issuable on the exercise of stock options outstanding as of March 15, 2000 at a weighted average exercise price of $2.16 per share;
- 990,000 shares that may be issued upon exercise of warrants outstanding as of March 15, 2000 at an exercise price of $2.50 per share; or
- 3,032,001 additional shares that we could issue under our stock option plans.

Unless otherwise indicated, information in this prospectus gives effect to the following:

- a stock dividend paid on April 5, 2000 to effect a 3-for-1 stock split;
- the filing of our amended and restated certificate of incorporation;
- the adoption of our amended and restated bylaws immediately prior to the closing of this offering;
- no exercise of the underwriters' over-allotment option; and
- an estimated initial public offering price of $23.00 per share, the midpoint of the range shown on the cover of this prospectus.

COMMON STOCK OFFERED.....	10,000,000 shares
COMMON STOCK TO BE OUTSTANDING AFTER THIS OFFERING.....	47,515,051 shares
USE OF PROCEEDS.....	We expect to use the net proceeds to: - increase our functional genomics research efforts; - expand our Human Gene Trap database and OmniBank database and library; - generate full-length gene sequences for potential drug targets and therapeutic proteins; and - fund working capital, capital expenditures and other general corporate purposes. Please read "Use of Proceeds."
NASDAQ NATIONAL MARKET SYMBOL.....	"LEXG"

SUMMARY FINANCIAL DATA

The following table summarizes our statements of operations data for the period from our inception on July 7, 1995 through December 31, 1995 and the years ended December 31, 1996, 1997, 1998 and 1999 and our balance sheet data as of December 31, 1999. The pro forma net loss per share data and the pro forma balance sheet data reflect the conversion of our outstanding convertible preferred stock upon the closing of this offering. The pro forma as adjusted balance sheet data reflect that conversion and also reflect the sale of 10,000,000 shares of common stock in this offering at an assumed initial public offering price of $23.00 per share after deducting underwriting discounts and estimated offering expenses. The following data should be read with our financial statements, including the accompanying notes, and with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. Because all of our outstanding convertible preferred stock will be converted at the closing of this offering, we will no longer recognize accretion on our redeemable convertible preferred stock.

In thousands, except share data	PERIOD FROM INCEPTION (JULY 7, 1995) THROUGH DECEMBER 31, 1995	YEAR ENDED DECEMBER 31, 1996	1997	1998	1999
STATEMENTS OF OPERATIONS DATA					
Revenues	$ --	$ 306	$ 968	$ 2,242	$ 4,738
Operating expenses					
Research and development	445	2,409	4,970	8,410	14,646
General and administrative	236	764	1,473	2,024	2,913
Total operating expenses	681	3,173	6,443	10,434	17,559
Loss from operations	(681)	(2,867)	(5,476)	(8,192)	(12,821)
Interest income (expense), net	9	(12)	74	711	346
Net loss	(672)	(2,879)	(5,402)	(7,481)	(12,475)
Accretion on redeemable convertible preferred stock	--	--	--	(357)	(535)
Net loss attributable to common stockholders	$ (672)	$(2,879)	$(5,402)	$(7,838)	$(13,011)
Net loss per common share, basic and diluted	$ (0.07)	$ (0.17)	$ (0.23)	$ (0.32)	$ (0.5 3)
Shares used in computing net loss per common share, basic and diluted	9,861,297	17,346,228	23,988,969	24,445,422	24,530,427
Pro forma net loss per common share, basic and diluted					$ (0.33)
Shares used in computing pro forma net loss per common share, basic and diluted					37,264,419

In thousands	AS OF DECEMBER 31, 1999 ACTUAL	PRO FORMA (UNAUDITED)	PRO FORMA AS ADJUSTED (UNAUDITED)
BALANCE SHEET DATA			
Cash, cash equivalents and marketable securities	$ 9,156	$ 9,156	$222,056
Working capital	2,021	2,121	214,921
Total assets	22,295	22,295	235,195
Long-term obligations, net of current portion	3,577	3,577	3,577
Redeemable convertible preferred stock	30,050	--	--
Accumulated deficit	(28,909)	(28,909)	(28,909)
Total stockholders' equity (deficit)	(21,936)	8,114	221,014

RISK FACTORS

You should carefully consider the following risk factors and all other information contained in this prospectus before purchasing our common stock. Investing in our common stock involves a high degree of risk. If any of the following risks actually occurs, we may not be able to conduct our business as currently planned and our financial condition and operating results could be seriously harmed. In addition, the trading price of our common stock could decline due to the occurrence of any of these risks, and you may lose all or part of your investment. Please read "Special Note Regarding Forward-Looking Statements."

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 have incurred net losses since our inception, including a net loss of approximately $12.5 million for the year ended December 31, 1999. As of December 31, 1999, we had an accumulated deficit of approximately $28.9 million. We are unsure when we will become profitable, if at all. The size of our net losses will depend, in part, on the rate of growth, if any, in our revenues and on the level of our expenses.

We derive substantially all of our revenues from subscriptions to our databases, collaborations for the development and, in some cases, analysis of knockout mice and government grants, and will continue to do so for the foreseeable future. Revenues from database subscriptions, collaborations and grants are uncertain because our existing agreements have fixed terms or relate to specific projects of limited duration. Our ability to secure future agreements will depend upon our ability to address the needs of our potential future subscribers and collaborators.

A large portion of our expenses are fixed, including expenses related to facilities, equipment and personnel. In addition, we expect to spend significant amounts to fund research and development and to enhance our core technologies. As a result, we expect that our operating expenses will increase significantly in the near term and, consequently, we will need to generate significant additional revenues to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

WE ARE AN EARLY-STAGE COMPANY WITH AN UNPROVEN BUSINESS STRATEGY

Our strategy of using our gene sequence databases and knockout mice to select promising candidates for drug target development is unproven. We have generated limited revenues to date from subscriptions to our databases and collaborations for the development and, in some cases, analysis of knockout mice. Our success will depend upon our ability to enter into additional subscription and collaboration agreements on favorable terms, determine which genes have potential value and select an appropriate commercialization strategy for each potential product we or our collaborators choose to pursue.

Biotechnology and pharmaceutical companies have successfully developed and commercialized only a limited number of gene-based products to date. We have not proven our ability to identify gene-based drugs or drug targets with commercial potential, or to develop or commercialize drugs or drug targets that we do identify. It is difficult to successfully select those genes with the most potential for commercial development, and we do not know that any products based on genes that we discover can be successfully commercialized. In addition, we may experience unforeseen technical complications in the processes we use to generate our gene sequence database and functional genomics resources. These complications could materially delay or limit the use of those databases and resources, substantially increase the anticipated cost of generating them or prevent us from implementing our processes at appropriate quality and throughput levels.

WE WILL NEED ADDITIONAL CAPITAL IN THE FUTURE AND, IF IT IS NOT AVAILABLE, WE WILL HAVE TO CURTAIL OR CEASE OPERATIONS

Our future capital requirements will be substantial and will depend on many factors, including our ability to obtain database subscription and collaboration agreements and government grants, the amount and timing of payments under such agreements and grants, 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.

We anticipate that the net proceeds of this offering and interest earned thereon will enable us to maintain our currently planned operations for at least two years. However, changes may occur that would consume available capital resources significantly sooner than we expect. If our capital resources are insufficient to meet future capital requirements, we will have to raise additional funds to continue the development of our technologies and complete the commercialization of products, if any, resulting from our technologies. We may be unable to raise sufficient additional capital; if so, we will have to curtail or cease operations.

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

There are a finite number of genes in the human genome, and we believe that the majority of such genes have been identified by us or others conducting genomic research and that virtually all will be identified within the next few years. We face significant competition in our efforts to discover and patent the sequence and other information derived from such genes from entities using alternative, and in some cases higher volume and larger scale, approaches for the same purpose.

We also face competition from entities using more traditional methods to discover genes related to particular diseases. Many of these entities have substantially greater financial, scientific and human resources than we do. A large number of universities and other not-for-profit institutions, many of which are funded by the U.S. and foreign governments, are also conducting research to discover genes. A substantial portion of this research is being conducted under the international Human Genome Project, a multi-billion dollar program funded by the U.S. government and The Wellcome Trust. The Human Genome Project's initial rough draft of the human genome is expected to be completed and released this year. Any one or more of these entities may discover and establish a patent position in one or more of the genes that we wish to study.

We also face significant competition in our drug discovery and product development efforts from entities using traditional knockout mouse technology and other functional genomics technologies, as well using other traditional drug discovery techniques. These competitors may develop products earlier than we do, obtain regulatory approvals faster than we can and develop products that are more effective than ours. Our ability to use our patent rights to prevent competition in the creation and use of knockout mice is more limited outside of the United States. Competitors could discover and establish patents in genes or gene products that we or our collaborators identify as a drug target or therapeutic protein. Numerous companies are in the business of determining the function of genes and gene products. Furthermore, other methods for conducting functional genomics research may ultimately prove superior, in some or all respects, to the use of knockout mice. In addition, technologies more advanced than or superior to our gene trapping technology may be developed, thereby rendering our gene trapping technology obsolete.

WE RELY HEAVILY ON COLLABORATORS TO DEVELOP AND COMMERCIALIZE PRODUCTS BASED ON GENES THAT WE IDENTIFY AS PROMISING CANDIDATES FOR DEVELOPMENT AS DRUG TARGETS

Since we do not currently possess the resources necessary to develop, obtain approvals for or commercialize potential products based on genes contained in our databases or genes that we identify as promising candidates for development as drug targets or therapeutic proteins, we must enter into collaborative arrangements to develop and commercialize these products. We will have limited or no control over the resources that any collaborator may devote to this effort. Any of our present or future collaborators may not perform their obligations as expected. These collaborators may breach or terminate their agreements with us or otherwise fail to conduct product discovery, development or commercialization activities successfully or in a timely manner. Further, our collaborators may elect not to develop products arising out of our collaborative arrangements or may not devote sufficient resources to the development, approval, manufacture, marketing or sale of these products. If any of these events occurs, we may not be able to develop or commercialize potential products.

Some of our agreements provide us with rights to participate in the commercial development of compounds or therapeutic approaches derived from our collaborations or access to our databases, technology or intellectual property. We may not be able to obtain such rights in future collaborations or agreements. Our ability to obtain such rights depends in part on the validity of our intellectual property, the advantages and novelty of our technologies and databases and our negotiating position relative to each potential collaborator or customer. Previous attempts by others in the industry to obtain these rights with respect to the development of knockout mice and related technologies have generated considerable controversy, especially in the academic community.

ANY CANCELLATION BY OR CONFLICTS WITH OUR COLLABORATORS COULD HARM OUR BUSINESS

Our collaboration agreements may not be renewed and may be terminated in the event either party fails to fulfill its obligations under these agreements. Any failure to renew or cancellation by a collaborator could mean a significant loss of revenues. In 1999, Millennium Pharmaceuticals, Inc. accounted for greater than 10% of our revenues. Millennium has elected not to extend its database subscription agreement, one of its two agreements with us, beyond its initial term. Similar non-renewals or terminations could result in reductions in our revenues and volatility in our earnings.

In addition, we may pursue opportunities in fields that could conflict with those of our collaborators. Moreover, disagreements could arise with our collaborators over rights to our intellectual property or our rights to share in any of the future revenues of compounds or therapeutic approaches developed by our collaborators. These kinds of disagreements could result in costly and time-consuming litigation. Any conflict with our collaborators could reduce our ability to obtain future collaboration agreements and could have a negative impact on our relationship with existing collaborators, adversely affecting our business and revenues. Some of our collaborators could also become competitors in the future. Our collaborators could develop competing products, preclude us from entering into collaborations with their competitors or terminate their agreements with us prematurely. Any of these developments could harm our product development efforts.

WE HAVE NO EXPERIENCE IN DEVELOPING AND COMMERCIALIZING PRODUCTS ON OUR OWN

Our ability to develop and commercialize products on our own will depend on our ability to internally develop preclinical, clinical, regulatory and sales and marketing capabilities, or enter into arrangements with third parties to provide those functions. We may not be successful in developing these capabilities or entering into agreements with third parties on favorable terms, or at all. Further, our reliance upon third parties for these capabilities could reduce our control over such activities and could make us dependent upon these parties. Our inability to develop or contract for these capabilities would significantly impair our ability to develop and commercialize products.

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

We are highly dependent on Arthur T. Sands, M.D., Ph.D., our president and chief executive officer, as well as other principal members of our management and scientific staff. The loss of any of these personnel would have a material adverse effect on our business, financial condition or results of operations and could inhibit our product development and commercialization efforts. Although we have entered into employment agreements with some of our key personnel, including Dr. Sands, these employment agreements are for a limited period of time and not all key personnel have employment agreements.

We do not currently have sufficient executive management personnel to fully execute our business plan. There is currently a shortage of skilled executives, which is likely to continue and intensify. In addition, recruiting and retaining qualified scientific personnel to perform future research and development work will be critical to our success. Competition for experienced scientists is high. Failure to recruit and retain executive management and scientific personnel on acceptable terms would prevent us from achieving our business objectives.

WE MAY ENCOUNTER DIFFICULTIES IN MANAGING OUR GROWTH, WHICH COULD INCREASE OUR LOSSES

We have experienced a period of rapid growth that has placed and, if this growth continues, will continue to place a strain on our human and capital resources. If we are unable to manage our growth effectively, our losses could increase. The number of our employees increased from 57 at December 31, 1997 to 93 at December 31, 1998 and 122 at December 31, 1999. We intend to increase the number of our employees significantly in 2000. Our ability to manage our operations and growth effectively requires us to continue to expend funds to improve our operational, financial and management controls, reporting systems and procedures. If we are unable to successfully implement improvements to our management information and control systems in an efficient or timely manner, or if we encounter deficiencies in existing systems and controls, our management may not have adequate information to manage our day-to-day operations.

BECAUSE OUR ENTIRE OMNIBANK MOUSE CLONE LIBRARY IS LOCATED AT A SINGLE FACILITY, THE OCCURRENCE OF A DISASTER COULD SIGNIFICANTLY DISRUPT OUR BUSINESS

Our OmniBank mouse clone library and its back-up are stored in liquid nitrogen freezers located at our facility in The Woodlands, Texas. If a disaster such as a fire, flood, hurricane, tornado or similar event significantly damages or destroys the facility in which our mouse clone library and back-up are stored, our business could be disrupted until we could regenerate the library and, as a result, our stock price could decline. Our business interruption insurance may not be sufficient to compensate us in the event of a major interruption due to such a disaster.

RISKS RELATED TO OUR INDUSTRY

OUR ABILITY TO PATENT OUR DISCOVERIES IS UNCERTAIN BECAUSE PATENT LAWS AND THEIR INTERPRETATION ARE HIGHLY UNCERTAIN AND SUBJECT TO CHANGE

The patent positions of biotechnology firms generally are highly uncertain and involve complex legal and factual questions that will determine who has the right to develop a particular product. No clear policy has emerged regarding the breadth of claims covered in biotechnology patents. The biotechnology patent situation outside the United States is even more uncertain and is currently undergoing review and revision in many countries. Changes in, or different interpretations of, patent laws in the United States and other countries might allow others to use our discoveries or to develop and commercialize our products without any compensation to us.

OUR PATENT APPLICATIONS MAY NOT RESULT IN ENFORCEABLE PATENT RIGHTS

Our disclosures in our patent applications may not be sufficient to meet the statutory requirements for patentability in all cases. Additionally, our patent applications will cover many genes. As a result, we cannot predict which of our patent applications will result in the granting of patents or the timing of the granting of our patents. In addition, the Human Genome Project, as well as many companies and institutions, have identified genes and deposited partial gene sequences in public databases and are continuing to do so. These public disclosures might limit the scope of our claims or make unpatentable subsequent patent applications on full-length genes.

Other companies or institutions have filed and will file patent applications that attempt to patent genes or gene sequences that may be similar to our patent applications. The Patent and Trademark Office could decide competing patent claims in an interference proceeding. Any such proceeding would be costly, and we may not prevail. In addition, patent applications filed by third parties may have priority over patent applications we file. In this event, the prevailing party may require us or our collaborators to stop pursuing a potential product or to negotiate a license arrangement to pursue the potential product. We may not be able to obtain a license from the prevailing party on acceptable terms, or at all.

Some court decisions indicate that disclosure of a partial sequence may not be sufficient to support the patentability of a full-length sequence. We believe that these court decisions and the uncertain position of the Patent and Trademark Office present a significant risk that the Patent and Trademark Office will not issue patents based on patent disclosures limited to partial gene sequences, like those represented in the Human Gene Trap database. In addition, we are uncertain about the scope of the coverage, enforceability and commercial protection provided by any patents issued on the basis of partial gene sequences.

IF OTHER COMPANIES AND INSTITUTIONS OBTAIN PATENTS CLAIMING THE FUNCTIONAL USES OF GENES AND GENE PRODUCTS BASED UPON GENE SEQUENCE INFORMATION AND PREDICTIONS OF GENE FUNCTION, WE MAY BE UNABLE TO OBTAIN PATENTS FOR OUR DISCOVERIES OF BIOLOGICAL FUNCTION IN KNOCKOUT MICE

We intend to pursue patent protection covering the novel uses and functions of new and known genes and proteins in mammalian physiology and disease states. While an actual description of the biological function of a gene or protein should enhance a patent position, we cannot assure you that such information will increase the probability of issuance of any patents. Further, many other entities are currently filing patents on genes based primarily on gene sequence information alone. Many such applications seek to protect partial human gene sequences, full-length gene sequences and the deduced protein products encoded by the sequences. In general, such applications attempt to assign biologic function to the DNA sequences based on computer predictions. While we believe that patents covering gene function based on speculation and prediction will not be

issued, there is the significant possibility that patents claiming the functional uses of genes and gene products will be issued to our competitors based on such information.

IF OUR POTENTIAL PRODUCTS CONFLICT WITH PATENTS THAT COMPETITORS, UNIVERSITIES OR OTHERS HAVE OBTAINED, THEN WE MAY BE UNABLE TO COMMERCIALIZE THOSE PRODUCTS

Our potential products and those of our collaborators may give rise to claims that they infringe the patents of others. This risk will increase as the biotechnology industry expands and as other companies obtain more patents and attempt to discover genes through the use of high-speed sequencers. Other companies or institutions could bring legal actions against us or our collaborators for damages or to stop manufacturing and marketing the affected products. If any of these actions are successful, in addition to potential liability for damages, these persons may require us or our collaborators to obtain a license in order to continue to manufacture or market the affected products or may force us to terminate manufacturing or marketing efforts. We believe that there will continue to be significant litigation in our industry regarding patent and other intellectual property rights. Certain of our competitors have and are continuing to expend significant amounts of time, money and management resources on intellectual property litigation. If we become involved in litigation, it could consume a substantial portion of our resources and could negatively affect our results of operations.

ISSUED PATENTS MAY NOT FULLY PROTECT OUR DISCOVERIES, AND OUR COMPETITORS MAY BE ABLE TO COMMERCIALIZE PRODUCTS SIMILAR TO THOSE COVERED BY OUR ISSUED PATENTS

Issued patents may not provide commercially-meaningful protection against competitors. Other companies or institutions may challenge our or our collaborators' patents or independently develop similar products that could result in an interference proceeding in the Patent and Trademark Office or a legal action. In the event any single researcher or institution infringes upon our or our collaborators' patent rights, enforcing these rights may be difficult and can be time consuming. Others may be able to design around these patents or develop unique products providing effects similar to our products.

In addition, others may discover uses for genes or proteins other than those uses covered in our patents, and these other uses may be separately patentable. Even if we have a patent claim on a particular gene, the holder of a patent covering the use of that gene could exclude us from selling a product that is based on the same use of that gene. In addition, with respect to certain of our patentable inventions, we have decided not to pursue patent protection outside the United States, both because we do not believe it is cost effective and because of confidentiality concerns. Accordingly, our international competitors could develop, and receive foreign patent protection for gene sequences and functions for which we are seeking U.S. patent protection.

OUR RIGHTS TO THE USE OF TECHNOLOGIES LICENSED BY THIRD PARTIES ARE NOT WITHIN OUR CONTROL

We rely, in part, on licenses to use certain technologies which are material to our business. We do not own the patents which underly these licenses. Our rights to use these technologies and practice the inventions claimed in the licensed patents are subject to our licensors abiding by the terms of those licenses and not terminating them. In many cases, we do not control the prosecution or filing of the patents to which we hold licenses. We rely upon our licensors to prevent infringement of those patents. The scope of our rights under our licenses may be subject to dispute by our licensors or third parties.

WE MAY BE UNABLE TO PROTECT OUR TRADE SECRETS

While we have entered into confidentiality agreements with employees and collaborators, we may not be able to prevent the disclosure of our trade secrets. In addition, other companies or institutions may independently develop substantially equivalent information and techniques.

WE AND OUR COLLABORATORS ARE SUBJECT TO EXTENSIVE AND UNCERTAIN GOVERNMENT REGULATORY REQUIREMENTS, WHICH COULD INCREASE OUR OPERATING COSTS OR ADVERSELY AFFECT OUR ABILITY TO OBTAIN GOVERNMENT APPROVAL OF PRODUCTS BASED ON GENES THAT WE IDENTIFY IN A TIMELY MANNER OR AT ALL

Drugs and diagnostic products are subject to an extensive and uncertain regulatory approval process by the FDA and comparable agencies in other countries. The regulation of new products is extensive, and the required process of laboratory testing and human studies is lengthy and expensive. The burden of these regulations will fall on us to the extent we are developing proprietary products on our own. If the products are the result of a collaboration effort, these burdens may fall on our collaborating partner or may be shared with us. We may not be able to obtain FDA approvals for those products in a timely manner, or at all. We may encounter significant delays or excessive costs in our efforts to secure necessary approvals or licenses. Even if we obtain FDA regulatory approvals, the FDA extensively regulates manufacturing, labeling, distributing, marketing, promotion and advertising after product approval. Moreover, several of our product development areas may involve relatively new technology and have not been the subject of extensive product testing in humans. The regulatory requirements governing these products and related clinical procedures remain uncertain and the products themselves may be subject to substantial review by foreign governmental regulatory authorities that could prevent or delay approval in those countries. Regulatory requirements ultimately imposed on our products could limit our ability to test, manufacture and, ultimately, commercialize our products.

SECURITY RISKS IN ELECTRONIC COMMERCE OR UNFAVORABLE INTERNET REGULATION MAY DETER FUTURE USE OF OUR PRODUCTS AND SERVICES

We provide access to our databases and the opportunity to acquire our knockout mice on the Internet. A fundamental requirement to conduct Internet-based, business-to-business electronic commerce is the secure transmission of confidential information over public networks. Advances in computer capabilities, new discoveries in the field of cryptography or other developments may result in a compromise or breach of the algorithms we use to protect content and transactions on Lexgen.com or proprietary information in our OmniBank database. Anyone who is able to circumvent our security measures could misappropriate our proprietary information, confidential customer information or cause interruptions in our operations. We may be required to incur significant costs to protect against security breaches or to alleviate problems caused by breaches. Further, a well-publicized compromise of security could deter people from using the Internet to conduct transactions that involve transmitting confidential information.

Because of the growth in electronic commerce, Congress has held hearings on whether to regulate providers of services and transactions in the electronic commerce market, and federal or state authorities could enact laws, rules or regulations affecting our business or operations. If enacted and applied to our business, these laws, rules or regulations could render our business or operations more costly, burdensome, less efficient or impracticable.

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

Our research and development processes involve the use of hazardous materials, including chemicals and radioactive and biological materials. Our operations also produce hazardous waste products. We cannot eliminate the risk of accidental contamination or discharge or any resultant injury from these materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of these materials. We could be subject to civil damages in the event of an improper or unauthorized release of, or exposure of individuals to, these hazardous materials. In addition, claimants may sue us for injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed our total assets. Compliance with environmental laws and regulations may be expensive, and current or future environmental regulations may impair our research, development or production efforts.

WE MAY BE SUED FOR PRODUCT LIABILITY

We or our collaborators may be held liable if any product we or our collaborators develop, or any product which is made with the use or incorporation of any of our technologies, causes injury or is found otherwise unsuitable during product testing, manufacturing, marketing or sale. Although we currently have and intend to maintain product liability insurance, this

insurance may become prohibitively expensive, or may not fully cover our potential liabilities. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of products developed by us or our collaborators. If we are sued for any injury caused by our or our collaborators' products, our liability could exceed our total assets.

PUBLIC PERCEPTION OF ETHICAL AND SOCIAL ISSUES MAY LIMIT OR DISCOURAGE THE USE OF OUR TECHNOLOGIES, WHICH COULD REDUCE OUR REVENUES

Our success will depend in part upon our ability to develop products discovered through our gene trapping and knockout mouse technologies. Governmental authorities could, for social or other purposes, limit the use of genetic processes or prohibit the practice of our gene trapping and knockout mouse technologies. Claims that genetically engineered products are unsafe for consumption or pose a danger to the environment may influence public attitudes. The subject of genetically modified organisms, like knockout mice, has received negative publicity and aroused public debate in some countries. Ethical and other concerns about our technologies, particularly the use of genes from nature for commercial purposes and the products resulting from this use, could adversely affect our market acceptance.

RISKS RELATED TO THIS OFFERING

OUR STOCK PRICE COULD BE EXTREMELY VOLATILE, AND YOU MAY NOT BE ABLE TO RESELL YOUR SHARES AT OR ABOVE THE INITIAL OFFERING PRICE

Prior to this offering, there has been no public market for shares of our common stock. An active trading market may not develop following completion of this offering, and if it develops, may not be maintained. The initial public offering price for the shares will be determined by negotiations between us and representatives of the underwriters. This price may not be indicative of prices that may prevail later in the market. The stock market has experienced significant price and volume fluctuations, and the market prices of technology companies, particularly life science companies such as ours and companies whose businesses are dependent on the Internet, have been highly volatile. In addition, broad market and industry fluctuations that are not within our control may adversely affect the trading price of our common stock. You may not be able to resell your shares at or above the initial public offering price.

In addition, our quarterly operating results have fluctuated in the past and are likely to do so in the future. These fluctuations could cause our stock price to fluctuate significantly or decline. In addition to the risks and uncertainties described in this section, some of the factors that could cause our operating results to fluctuate include:

- expiration of database subscriptions or research contracts with collaborators or government research grants, which may not be renewed or replaced;

- the success rate of our discovery efforts leading to milestones and royalties;

- the timing and willingness of collaborators to commercialize products which would result in royalties;

- general and industry-specific economic conditions, which may affect our and our collaborators' research and development expenditures; and

- the timing and content of information released by the Human Genome Project.

Due to the possibility of fluctuations in our revenues and expenses, we believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance. Our operating results in some quarters may not meet the expectations of stock market analysts and investors. In that case, our stock price would probably decline.

In the past, stockholders have often instituted securities class action litigation after periods of volatility in the market price of a company's securities. If a stockholder files a securities class action suit against us, we would incur substantial legal fees and our management's attention and resources would be diverted from operating our business in order to respond to the litigation.

THERE IS A LARGE NUMBER OF SHARES THAT MAY BE SOLD IN THE MARKET FOLLOWING THIS OFFERING, WHICH MAY DEPRESS THE MARKET PRICE OF OUR COMMON STOCK

Sales of a substantial number of shares of our common stock in the public market following this offering could cause the market price of our common stock to decline. Upon completion of this offering, we will have outstanding an aggregate of 47,515,051 shares of common stock, assuming no exercise of outstanding options or warrants. Of these shares, all of the shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act of 1933, or the Securities Act, unless these shares are purchased by affiliates. The remaining 37,515,051 shares of common stock held by existing stockholders are restricted securities. Restricted securities may be sold in the public market only if registered or if they qualify for an exemption from registration under the Securities Act.

Our executive officers, directors and certain stockholders have agreed pursuant to "lock-up" agreements that, with limited exceptions, for a period of 180 days from the date of this prospectus, they will not sell any shares of common stock without the prior written consent of J.P. Morgan Securities Inc.

As a result of these "lock-up" agreements and the rules under the Securities Act, the restricted shares will be available for sale in the public market, subject to certain volume and other restrictions, as follows:

DAYS AFTER THE EFFECTIVE DATE	NUMBER OF SHARES ELIGIBLE FOR SALE	COMMENT
Upon effectiveness	--	Shares not locked-up and eligible for sale under Rule 144
90 days	--	Shares not locked-up and eligible for sale under Rules 144 and 701
180 days	34,972,551	Lock-up released; shares eligible for sale under Rules 144 and 701

Additionally, of the 8,473,134 shares that may be issued upon the exercise of options outstanding as of March 15, 2000, approximately 4,185,252 shares are subject to options which will be vested and exercisable 180 days after the date of this prospectus.

On the date 180 days after the closing date of this offering, the holders of 37,170,186 shares of our common stock and warrants exercisable for 740,001 additional shares of common stock will have rights to require us to register their shares under the Securities Act. Upon the effectiveness of a registration statement covering these shares, these shares would become freely tradable.

Immediately after this offering, we intend to file a registration statement under the Securities Act covering approximately 11,505,135 shares of common stock reserved for issuance under our stock option plans. We expect the registration statement to be filed and become effective as soon as practicable after the closing of this offering. Accordingly, shares registered under such registration statement will be available for sale in the open market upon the effectiveness of the registration statement unless they are held by persons that have signed a "lock-up" agreement.

NEW INVESTORS IN OUR COMMON STOCK WILL EXPERIENCE IMMEDIATE AND SUBSTANTIAL DILUTION

The initial public offering price will be substantially higher than the book value per share of our common stock. Investors purchasing common stock in this offering will incur immediate dilution of $18.33 in net tangible book value per share of common stock, based on an assumed public offering price of $23.00 per share.

CONCENTRATION OF OWNERSHIP AMONG OUR EXISTING EXECUTIVE OFFICERS, DIRECTORS AND PRINCIPAL STOCKHOLDERS ENABLES THEM TO COLLECTIVELY CONTROL ALL SIGNIFICANT CORPORATE DECISIONS

Following this offering our directors, entities affiliated with our directors and our executive officers will beneficially own, in the aggregate, approximately 51.0% of our outstanding common stock. These stockholders as a group will be able to elect our directors and officers, control the management and affairs of our company and will be able to control most matters requiring the approval of our stockholders, including any merger, consolidation or sale of all or substantially all of our assets and any other significant corporate transaction. The concentration of ownership will also prevent a change of control of our company at a premium price if these stockholders oppose it. Please read "Principal Stockholders" for details on our stock ownership.

PROVISIONS OF OUR CHARTER DOCUMENTS AND DELAWARE LAW MAY INHIBIT A TAKEOVER, WHICH COULD NEGATIVELY AFFECT OUR STOCK PRICE

Provisions in our amended and restated charter and bylaws and applicable provisions of the Delaware General Corporation Law may make it more difficult for a third party to acquire control of us without the approval of our board of directors. These provisions may make it more difficult or expensive for a third party to acquire a majority of our outstanding voting common stock or delay, prevent or deter a merger, acquisition, tender offer or proxy contest, which may negatively affect our stock price.

WE MAY HAVE LIABILITY FOR A MEMORANDUM WE SENT TO OUR EMPLOYEES RELATING TO OUR DIRECTED SHARE PROGRAM IF THE MEMORANDUM IS DEEMED TO BE A PROSPECTUS THAT DOES NOT COMPLY WITH THE REQUIREMENTS OF THE SECURITIES ACT OF 1933

We sent a written memorandum to our employees informing them that our underwriters would conduct a directed share program as part of this offering and asking that they identify members of their families whom they wished the underwriters to contact in connection with that program. We did not request any indication from our employees or their family members as to their interest in buying shares in this offering, nor did we send any communication regarding this offering or the directed share program to their family members. If the memorandum were found to be a prospectus that did not comply with the requirements of the Securities Act, we could have liability under the Securities Act to persons who received the memorandum and who purchase stock in this offering. This liability could include the right of such persons, for a period of one year from the date of purchase of the common stock, to obtain recovery of the consideration paid for the common stock or if they had already sold the common stock, sue us for damages resulting from their purchase of common stock. Assuming these persons purchase all of the shares in the directed share program, these refunds or damages could total up to approximately $11.5 million based on the assumed initial public offering price of $23.00 (the midpoint of the range on the cover page), in the event that investors suffer a total loss of their investment during this period and seek refunds or damages.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus 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, including the risks outlined under "Risk Factors," that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from those 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.

USE OF PROCEEDS

Our net proceeds from the sale of the 10,000,000 shares of common stock we are offering, at an assumed initial public offering price of $23.00 per share, are estimated to be approximately $212.9 million after deducting underwriting discounts and estimated offering expenses payable by us. We expect to use the net proceeds to:

- increase functional genomics research using knockout mice to define the functions of genes that encode potential drug targets and therapeutic proteins;
- expand our Human Gene Trap database and OmniBank database and library;
- generate full-length sequences of a prioritized set of genes that appear by computer, or bioinformatics, analysis to encode potential drug targets and therapeutic proteins; and
- fund working capital, capital expenditures and other general corporate purposes.

The amounts and timing of our actual expenditures will depend upon numerous factors, including the status of our product development and commercialization efforts, the amount of proceeds actually raised in this offering, the amount of cash generated by our operations, competition and sales and marketing activities. We may also use a portion of the proceeds for the acquisition of, or investment in, companies, technologies or assets that complement our business. However, we have no present understandings, commitments or agreements to enter into any potential acquisitions or investments. Further, we have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds from this offering. Pending application of the net proceeds as described above, we intend to invest the net proceeds of the offering in short-term investment grade and U.S. government securities.

DIVIDEND POLICY

We have never paid cash dividends on our common stock or any other securities. We anticipate that we will retain all of our future earnings, if any, for use in the expansion and operation of our business and do not anticipate paying cash dividends in the foreseeable future.

CAPITALIZATION

The following table summarizes as of December 31, 1999 our cash, cash equivalents and marketable securities and our capitalization:

- on an actual basis; and
- on a pro forma basis to reflect the conversion of all our outstanding convertible preferred stock into 12,733,992 shares of common stock upon the closing of this offering and
- on a pro forma as adjusted basis to reflect the conversion of the preferred stock and the sale of 10,000,000 shares of common stock at an assumed initial public offering price of $23.00 per share, less estimated underwriting discounts and estimated offering expenses.

This table does not include: 5,196,555 shares issuable on the exercise of stock options outstanding as of December 31, 1999 at a weighted average exercise price of $1.67 per share; 1,003,500 shares issuable upon exercise of warrants outstanding as of December 31, 1999 at an exercise price of $2.50 per share; or 685,938 additional shares that we could have issued under our stock option plan as of such date.

This table should be read with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and accompanying notes appearing elsewhere in this prospectus.

	DECEMBER 31, 1999		
	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED
In thousands, except share data			
Cash, cash equivalents and marketable securities	$ 9,156	$ 9,156	$222,056
Long-term obligations, net of current portion	$ 3,577	$ 3,577	$ 3,577
Redeemable convertible preferred stock, $0.01 par value; 4,244,664 shares authorized, 4,244,664 shares issued and outstanding, actual; no shares authorized or outstanding, pro forma and pro forma as adjusted	30,050	--	--
Stockholders' equity (deficit):			
Preferred stock, $0.01 par value; 5,755,336 shares authorized, no shares issued and outstanding, actual; 5,000,000 shares authorized, no shares issued and outstanding, pro forma and pro forma as adjusted	--	--	--
Common stock, $0.001 par value; 120,000,000 shares authorized; 24,540,201 shares issued and outstanding, actual; 37,274,193 shares issued and outstanding, pro forma; 47,274,193 shares issued and outstanding, pro forma as adjusted	25	37	47
Additional paid-in capital	7,863	37,901	250,791
Deferred stock compensation	(915)	(915)	(915)
Accumulated deficit	(28,909)	(28,909)	(28,909)
Total stockholders' equity (deficit)	(21,936)	8,114	221,014
Total capitalization	$ 11,691	$ 11,691	$224,591

DILUTION

The pro forma net tangible book value of our common stock on December 31, 1999, reflecting the conversion of all outstanding shares of convertible preferred stock into shares of common stock upon the closing of this offering, was approximately $8.1 million, or approximately $0.22 per share. Pro forma net tangible book value per share represents the amount of our total tangible assets less total liabilities divided by the number of shares of common stock outstanding. Dilution in pro forma net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately afterwards. Assuming the sale of 10,000,000 shares of our common stock offered by this prospectus at an assumed initial public offering price of $23.00 per share, and after deducting estimated underwriting discounts and estimated offering expenses, our adjusted pro forma net tangible book value at December 31, 1999 would have been approximately $221 million, or approximately $4.67 per share. This represents an immediate decrease in net tangible book value of $18.33 per share to new investors purchasing shares of common stock in this offering. The following table illustrates this dilution on a per share basis.

Assumed initial public offering price per share		$23.00
Pro forma net tangible book value per share at December 31, 1999	$0.22	
Increase per share attributable to new investors	4.45	
Adjusted pro forma net tangible book value per share after this offering		4.67
Dilution per share to new investors		$18.33

The foregoing discussion and table assume no exercise of any outstanding stock options or warrants. The exercise of all options and warrants outstanding as of December 31, 1999 having an exercise price less than the initial public offering price would increase the dilutive effect to new investors to $18.66 per share.

The following table summarizes, on a pro forma basis, as of December 31, 1999, the differences between the number of shares of common stock purchased from us, the total consideration paid and the average price per share paid by existing stockholders and by the new investors purchasing shares in this offering. We have assumed an initial public offering price of $23.00 per share, and we have not deducted estimated underwriting discounts and estimated offering expenses in our calculations.

	SHARES PURCHASED		TOTAL CONSIDERATION		AVERAGE PRICE PER SHARE
	NUMBER	PERCENT	AMOUNT	PERCENT	
Existing stockholders	37,274,193	78.8%	$ 36,716,508	13.8%	$ 0.99
New investors	10,000,000	21.2	230,000,000	86.2	23.00
Total	47,274,193	100.0%	$266,716,508	100.0%	

SELECTED FINANCIAL DATA

The statements of operations data for each of the years ended December 31, 1997, 1998 and 1999, and the balance sheet data as of December 31, 1998 and 1999, have been derived from our audited financial statements included elsewhere in this prospectus that have been audited by Arthur Andersen LLP, independent public accountants. The statements of operations data for the period from our inception on July 7, 1995 through December 31, 1995 and for the year ended December 31, 1996, and the balance sheet data at December 31, 1995, 1996 and 1997, have been derived from our audited financial statements not included in this prospectus. The pro forma net loss per share data reflect the conversion of our outstanding convertible preferred stock upon closing of this offering. Our historical results are not necessarily indicative of results to be expected for any future period. The data presented below have been derived from financial statements that have been prepared in accordance with generally accepted accounting principles and should be read with our financial statements, including the accompanying notes, and with "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

	PERIOD FROM INCEPTION (JULY 7, 1995) THROUGH DECEMBER 31, 1995	YEAR ENDED DECEMBER 31, 1996	1997	1998	1999
In thousands, except share data					
STATEMENTS OF OPERATIONS DATA					
Revenues	$ --	$ 306	$ 968	$ 2,242	$ 4,738
Operating expenses					
Research and development	445	2,409	4,970	8,410	14,646
General and administrative	236	764	1,473	2,024	2,913
Total operating expenses	681	3,173	6,443	10,434	17,559
Loss from operations	(681)	(2,867)	(5,476)	(8,192)	(12,821)
Interest income (expense), net	9	(12)	74	711	346
Net loss	(672)	(2,879)	(5,402)	(7,481)	(12,475)
Accretion on redeemable convertible preferred stock	--	--	--	(357)	(535)
Net loss attributable to common stockholders	$ (672)	$(2,879)	$(5,402)	$(7,838)	$(13,011)
Net loss per common share, basic and diluted	$(0.07)	$ (0.17)	$ (0.23)	$ (0.32)	$ (0.53)
Shares used in computing net loss per common share, basic and diluted	9,861,297	17,346,228	23,988,969	24,445,422	24,530,427
Pro forma net loss per common share, basic and diluted					$ (0.33)
Shares used in computing pro forma net loss per common share, basic and diluted					37,264,419

	AS OF DECEMBER 31, 1995	1996	1997	1998	1999
In thousands					
BALANCE SHEET DATA					
Cash, cash equivalents and marketable securities	$ 340	$ --	$ 1,980	$ 19,422	$ 9,156
Working capital	9	(303)	1,009	18,102	2,021
Total assets	721	1,090	4,917	28,516	22,295
Long-term obligations, net of current portion	--	81	5,268	5,024	3,577
Redeemable convertible preferred stock	--	--	--	29,515	30,050
Accumulated deficit	(672)	(3,551)	(8,953)	(16,790)	(28,909)
Total stockholders' equity (deficit)	340	521	(1,931)	(9,034)	(21,936)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read with "Selected Financial Data" and our financial statements and notes included elsewhere in this prospectus.

OVERVIEW

We are a genomics company using gene trapping technology to discover thousands of genes and to expand our OmniBank library of tens of thousands of knockout mouse clones for drug discovery. We derive substantially all of our revenues from subscriptions to our databases, collaborations for the development and, in some cases, analysis of knockout mice and from government grants. To date, we have generated a substantial portion of our revenues from a limited number of sources.

Since our inception, we have incurred significant losses and, as of December 31, 1999, we had an accumulated deficit of $28.9 million, which includes $892,362 of accretion on redeemable convertible preferred stock. Our losses have resulted principally from costs incurred in research and development and from general and administrative costs associated with our operations. Research and development expenses consist primarily of salaries and related personnel costs, material costs, legal expenses resulting from intellectual property prosecution and other expenses related to the generation of our Human Gene Trap database, OmniBank database and library and the development of knockout mice. We expense our research and development costs as they are incurred. 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 Human Gene Trap database, OmniBank database and library and functional genomics research efforts, we expect to incur increasing research and development and general and administrative costs. As a result, we will need to generate significantly higher revenues to achieve profitability.

Our quarterly operating results will depend upon many factors, including expiration of research contracts with collaborators or government research grants, the success rate of our discovery efforts leading to milestones and royalties, the timing and willingness of collaborators to commercialize products which would result in royalties, general and industry-specific economic conditions which may affect research and development expenditures and the timing and content of information released by the Human Genome Project. As a consequence, our quarterly operating results have fluctuated in the past and are likely to do so in the future.

During 1999, we recorded deferred stock compensation of $1.0 million. Deferred stock compensation represents the difference between the exercise price and the fair value of our common stock at the date of grant. We anticipate that additional deferred compensation totaling approximately $60.5 million will be recorded for options granted in the first quarter of 2000. These amounts are being amortized over the respective vesting periods of the individual stock options. We recorded amortization of deferred compensation of $85,633 for 1999. We expect to record amortization expense for deferred compensation as follows: $21.6 million during 2000, $12.9 million during 2001, $12.9 million during 2002, $12.9 million during 2003 and $1.1 million during 2004. The amount of deferred compensation expense to be recorded in future periods may decrease if unvested options for which deferred compensation has been recorded are subsequently canceled.

As of December 31, 1999, we had net operating loss carryforwards of approximately $27.0 million. We also had research and development tax credit carryforwards of approximately $671,000. The net operating loss and credit carryforwards will expire at various dates beginning in 2011, if not utilized. Utilization of the net operating losses and credits may be substantially limited due to the change in ownership provisions of the Internal Revenue Code of 1986 and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization.

RESULTS OF OPERATIONS

Years Ended December 31, 1999 and 1998

Revenues. Total revenues increased 111% to $4.7 million in 1999 from $2.2 million in 1998. Of the $2.5 million increase, $1.4 million was derived from increased database subscription and license fees and $1.1 million was derived from increased fees for the development of knockout mice. In 1999, Millenium Pharmaceuticals, Inc. and ZymoGenetics, Inc. represented 28% and 23% of revenues, respectively. In 1998, ZymoGenetics, Inc., Merck & Co. Inc., and Genetics Institute represented 24%, 12% and 11% of revenues, respectively.

Research and Development Expenses. Research and development expenses increased 74% to $14.6 million in 1999 from $8.4 million for 1998. The increase of $6.2 million was attributable to continued growth of research and development activities, including $2.6 million related to increased personnel and laboratory supply costs to support the generation of our

Human Gene Trap database, OmniBank database and library and the development of knockout mice and $2.9 million related to higher operating expenses as a result of the completion of our new animal facility in January 1999, with the remainder due to expansion in operating activities. As of December 31, 1999, production costs incurred in the development of knockout mice for commercial sale have not been significant.

General and Administrative Expenses. General and administrative expenses increased 44% to $2.9 million during 1999 from $2.0 million for 1998. The increase of $888,799 was due to $720,694 related to compensation for business development, finance and administrative personnel, with the remainder due to overall expansion in our operations.

Interest Income and Interest Expense. Interest income decreased 23% to $648,906 in 1999 from $838,110 in 1998. This decrease resulted from a declining cash and investment balance due to cash used in operating activities. Interest expense increased 139% to $302,802 in 1999 from interest expense of $126,665 in 1998. This increase resulted from higher debt obligation balances in 1999.

Years Ended December 31, 1998 and 1997

Revenues. Total revenues increased 132% to $2.2 million in 1998 from $967,742 in 1997. Of the $1.3 million increase, $425,075 was derived from increased database subscription and license fees and $585,789 was derived from increased fees from the development of knockout mice. In 1998, ZymoGenetics, Inc., Merck & Co. Inc., and Genetics Institute represented 24%, 12% and 11% of revenues, respectively. In 1997, Merck & Co. Inc. represented 25% of revenues.

Research and Development Expenses. Our research and development expenses increased 69% to $8.4 million in 1998 from $5.0 million in 1997. The increase of $3.4 million was due to $1.1 million related to compensation for additional scientific personnel and $1.7 million due to additional laboratory supply costs, with the remainder due to expansion in our operating activities.

General and Administrative Expenses. General and administrative expenses increased 37% to $2.0 million in 1998 from $1.5 million in 1997. The increase was due to hiring of additional personnel to support our growing business activities.

Interest Income and Interest Expense. Interest income increased 530% to $838,110 in 1998 from interest income of $133,004 for 1997. This increase was due to increases in cash and investment balances as a result of our $31.8 million redeemable convertible Series A preferred stock equity financing in May 1998. Interest expense increased 115% to $126,665 in 1998 from interest expense of $58,861 for 1997. This increase resulted from higher average capital lease and debt obligation balances in 1998.

LIQUIDITY AND CAPITAL RESOURCES

We have financed our operations from inception primarily through private sales of common and preferred stock, contract and milestone payments to us under our database subscription and collaboration agreements and equipment financing arrangements. As of December 31, 1999, we had received net proceeds of $36.7 million from issuances of common and preferred stock. In addition, from our inception through December 31, 1999, we received $13.1 million in cash payments from database subscription and license fees, fees for the development of knockout mice, sales of products related to the generation of knockout mice and government grants, of which $8.3 million had been recognized as revenues through December 31, 1999.

As of December 31, 1999, we had $9.2 million in cash, cash equivalents and marketable securities, as compared to $19.4 million as of December 31, 1998. We used $9.6 million for operations in the year ended December 31, 1999. This consisted of the net loss for the period of $12.5 million offset in part by non-cash charges of $1.9 million related to depreciation expense. We received $5.2 million from investing activities for the year ended December 31, 1999, which consisted principally of net proceeds from the sale of marketable securities of $9.3 million offset by purchases of property and equipment of $4.1 million.

In June 1999, we entered into a $5.0 million financing arrangement for the purchase of property and equipment. As of December 31, 1999, we had drawn down approximately $4.2 million and had $831,940 remaining available under this arrangement. As of December 31, 1999, $3.7 million of the amount outstanding was secured by the equipment financed. This facility accrues interest at a weighted-average rate of approximately 11.7% and is due in monthly installments through 2003. In addition, as of December 31, 1999, we had $133,398 in capitalized lease obligations outstanding compared to $303,199 at December 31, 1998.

Our capital requirements depend on numerous factors, including our ability to obtain database subscription and collaboration agreements and government grants, the amount and timing of payments under such agreements and grants, 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. 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 cash balances, together with the net proceeds of this offering and revenues to be derived from subscriptions to our databases, collaborations for the development and, in some cases, analysis of knockout mice and government grants, will be sufficient to fund our operations for at least two years. During or after this period, if cash generated by operations is insufficient to satisfy our liquidity requirements, we may 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.

IMPACT OF INFLATION

The effect of inflation and changing prices on our operations was not significant during the periods presented.

DISCLOSURE ABOUT MARKET RISK

Our exposure to market risk is confined to our cash and cash equivalents which have maturities of less than three months. We maintain an investment portfolio which consists of U.S. Government debt obligations and investment grade commercial paper that mature one to six months after December 31, 1999, which we believe are subject to limited credit risk. We currently do not hedge interest rate exposure. Because of the short-term maturities of our investments, we do not believe that an increase in market rates would have any negative impact on the realized value of our investment portfolio.

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

BUSINESS

COMPANY OVERVIEW

We are a genomics company using gene trapping technology to discover thousands of genes and to expand our OmniBank library of tens of thousands of knockout mouse clones for drug discovery. We have established an Internet exchange, Lexgen.com, to enable researchers worldwide to access our OmniBank library and to form collaborations with us to discover pharmaceutical products based on genes and knowledge of their function. Through our ongoing collaborations with pharmaceutical companies, biotechnology companies and academic researchers, we receive fees and may obtain royalties and milestone payments from commercialization of pharmaceutical products developed using our genomics technologies. We believe that providing global access to our OmniBank library through the Internet will significantly accelerate genomics research and will enable us to establish a leadership position in drug target and therapeutic protein discovery.

STRATEGY

Our principal objective is to establish a leadership position in drug target and therapeutic protein discovery. The key elements of our strategy include the following:

Discover and Obtain Proprietary Rights to a Substantial Number of Human Genes. We plan to continue the development of our Human Gene Trap database until we have substantially covered, or saturated, the human genome using our proprietary gene trapping technology. We intend to continue our efforts to obtain full-length sequences of a prioritized set of genes that appear by computer, or bioinformatics, analysis to encode potential drug targets and therapeutic proteins.

Expand OmniBank and Develop Custom Knockout Mice for Selected Genes. OmniBank currently contains over 70,000 knockout mouse clones. We plan to expand our OmniBank library until we have saturated the mouse genome using our proprietary gene trapping technology. We intend to use our patented gene targeting technology as a complement to OmniBank to generate custom knockout mice to discover the functions of specific genes.

Use the Internet to Establish Gene Function Discovery Collaborations. Through Lexgen.com, our genomics Internet exchange, we plan to expand our efforts to use OmniBank knockout mouse clones to establish e-Biology gene function discovery collaborations with researchers at pharmaceutical and biotechnology companies and academic institutions worldwide. We believe that we can harvest high-value information on gene function for drug discovery through our e-Biology collaborations.

Discover the Functions of Large Numbers of Genes that Encode Potential Drug Targets and Therapeutic Proteins. We plan to conduct internal research programs using a large number of knockout mice to discover the physiologic, cellular and biochemical functions of a prioritized set of genes. Our goal is to identify the most promising candidate genes for development as drug targets or therapeutic proteins. We plan to use functional genomics information obtained from our e-Biology collaborations to complement our internal research efforts.

Develop Promising Drug Candidates through Collaborations or with Our Own Resources. We have and will continue to establish drug discovery collaborations with pharmaceutical and biotechnology companies for the identification and development of promising drug target and therapeutic protein candidates. We will continue to seek combinations of research funding, licensing fees, milestone payments, royalties and co-promotion rights in connection with these collaborative agreements. Although we generally expect to rely on our collaborators for clinical development and commercialization of products, we may elect to pursue the research and clinical development of drug candidates on our own.

THE GENOME

The body is composed of specialized cells that perform different functions and are organized into tissues and organs. Cells in the body contain approximately 100,000 genes, referred to as the genome. Approximately 10% of the total number of genes are expressed in an individual cell, and different subsets of genes are expressed at significantly different levels in distinct cell types. Most genes direct the production of specific proteins, resulting in the production of approximately 10,000 different proteins in a typical cell. Proteins, such as peptide hormones, enzymes and receptors, carry out and regulate critical physiological functions in the body. The genome encodes the proteins made by cells of the body.

The human genome is comprised of complementary strands of deoxyribonucleic acid, or DNA, molecules organized into 23 pairs of chromosomes. These DNA molecules consist of long chains of nucleotide bases that pair to form a twisted ladder-like structure known as the double helix. There are four types of nucleotides in DNA, adenine, cytosine, guanine and thymine, which are often abbreviated by their first letters A, C, G and T. The entire human genome contains approximately 3.5 billion nucleotide base pairs.

Genes carry the specific information, or code, necessary to construct, or express, proteins that regulate human physiology. Genes make up approximately three to five percent of chromosomes and are structurally defined by the sequence of nucleotide bases contained in DNA. The remaining 95% to 97% of DNA in chromosomes does not code for protein. Genes are composed of segments called exons that are separated by non-coding DNA known as introns. Taken together, the coding and non-coding DNA is commonly referred to as genomic DNA or chromosomal DNA.

The information contained in genes is used to express proteins via a two-step process. The first step in protein expression is called transcription, in which the DNA sequence of a gene is copied into a molecule known as ribonucleic acid, or RNA. A splicing process within the cell then removes the introns, or non-coding segments, from the transcript, thereby creating a messenger RNA, or mRNA. The mRNA contains only the exons of the transcribed gene. In the second step, the mRNA directs the assembly of the protein product of the gene in a process called translation.

Genomics: Gene Sequence Discovery

The Human Genome Project and other publicly and privately-funded DNA sequencing efforts have invested considerable resources to sequence the genes in the human genome. Most of these resources have been invested in projects using two approaches: one approach known as expressed sequence tag, or EST, sequencing and another known as genomic DNA sequencing.

EST sequencing uses mRNA from transcription of genes that has been converted artificially, or in vitro, to form complementary DNA, or cDNA. High-throughput EST sequencing obtains partial DNA sequence from the ends of the cDNA molecules. It is generally believed that more than one-half of all human genes have been at least partially sequenced using the EST approach.

Obtaining a complete set of human gene sequences requires the sequencing of cDNAs from many different cell types and tissues. Since EST sequencing relies on cDNA from mRNAs, it can, at best, identify the 10% of genes that are typically expressed in the tissue or cell type from which the mRNA was obtained. EST sequencing is further complicated by the fact that many genes are expressed at thousands of times the levels of other genes, leading to thousands more copies of certain mRNAs as compared to mRNAs from rarely expressed genes. Using current EST technology, mRNAs expressed at very low levels are rarely detected. This has significant implications for genomics-based drug discovery since rare mRNAs are thought to encode key regulatory proteins that are enriched for potential drug targets or therapeutic proteins.

The Human Genome Project and certain other high-throughput genomic DNA sequencing efforts have employed a second approach involving the sequencing of genomic DNA or entire chromosomes. It is expected that the Human Genome Project will release a "working draft" of sequence from the human genome in the spring of 2000. Genomic sequencing efforts obtain the sequence of whole chromosomes, including the 95% to 97% of non-coding DNA.

Genomic sequencing of entire chromosomes is an expensive and inefficient way to determine gene sequence because the exons that represent a gene are separated by large regions of non-coding intron DNA sequence. A significant amount of analysis and additional information is required to identify the exons within the genomic sequence and to determine how those exons splice together to form mRNAs from genes.

Functional Genomics: Defining Gene Function

Gene sequencing permits identification of the nucleotide sequence of the gene but by itself does not predict the function of a gene in physiology and disease. The growing databases of gene sequences are analagous to a dictionary containing thousands of words, with only a handful of definitions.

Researchers use a variety of methods to obtain clues about gene function, like gathering information about where a gene's transcript is found and where the corresponding protein is expressed in the cell. Experiments are also conducted using cell culture, biochemical studies and non-mammalian organisms. While these methods may provide useful information about gene function at the biochemical and cellular levels, their ability to provide information about how genes control mammalian physiology is significantly limited.

The preferred method of determining a gene's function in mammals is to disrupt, or knock out, the gene in a mouse and then assess the physiological and biochemical consequences in the whole animal. The results of such an analysis can determine the function and disease relevance of a particular gene. Since mice and humans are mammals, the mouse has advantages over non-mammalian model organisms for defining the function and disease relevance of human genes:

- The human and mouse genomes bear a high degree of similarity; large regions of the two genomes contain similar genes in a similar order.

- The mouse is the only mammal for which ES cell cloning technology has been well-established, and it is also the only mammal that can be genetically engineered on a large scale.

- The mouse is one of the most widely-used animal model systems in the pharmaceutical industry because it has similar organ systems and physiology to humans.

The value of knockout mice as models for defining the function and disease relevance of human genes is further evidenced by the Mouse Genome Project recently initiated by the National Institute of Health. This project is the only large-scale mammalian genome sequencing project funded by the U.S. government other than the Human Genome Project itself.

While gene-targeting experiments in ES cells have led to substantial successes in identifying gene function, traditional methods of producing knockout mice are slow, labor-intensive and often unpredictable. These impediments have limited the rate at which knockout mice may be produced. In addition, only genes that are cloned and partially sequenced can be knocked out. This procedure requires highly-skilled scientific personnel and often requires a year or more of work. We estimate that, to date, knockout mice for fewer than five percent of genes have been made by traditional gene-targeting technology, indicating that substantial opportunities exist for high-throughput methodologies to create knockout mice to define gene function.

LEXICON GENETICS TECHNOLOGY

Gene Trapping

We believe that our proprietary gene trapping technology represents a significant advance in the discovery of genes and their function and an equally significant departure from traditional mechanisms of drug discovery. Our proprietary gene trapping technology uses a type of virus called a retrovirus that has been genetically engineered. These retroviruses infect cells in vitro, integrate into the chromosome of the cell and deliver molecular traps for genes. Our gene traps stimulate transcription and use the cell's own splicing machinery to extract a transcript of a gene from the chromosome for automated DNA sequencing. Additionally, when we introduce our gene traps in mouse ES cells, they disrupt the function of the trapped genes and allow for the production of knockout mice.

Gene Sequence Discovery. We believe that our proprietary gene trapping technology is able to identify genes largely independent of mRNA expression levels in any given cell type. This ability allows us to identify rarely expressed genes, which are thought to encode classes of proteins that are enriched for important drug targets and therapeutic proteins. The same ability also allows us to obtain DNA sequence of genes throughout the human genome at a fraction of the cost of EST or genomic sequencing approaches. As a result, we believe that our gene-trapping technology gives us a significant competitive advantage in the race to identify novel genes, overcoming many of the limitations of other gene discovery technologies.

COMPARISON OF GENE SEQUENCE DISCOVERY TECHNOLOGY

LEXICON GENE TRAPPING	EST SEQUENCING	CHROMOSOME SEQUENCING
- - Trapped genes include rarely expressed genes	- Bias toward sequencing highly expressed genes	- Only 3% to 5% of sequence contains genes
- - High rate of novel gene discovery	- Difficult to obtain any more novel genes	- Difficult to identify novel genes reliably
- - High-throughput gene function discovery	- Lacking functional genomics capability	- Lacking functional genomics capability

We have also conducted pilot programs in which we have demonstrated the utility of gene trapping in several agriculturally important animals and companion animals, and believe that our technology represents a superior method to capture gene sequences from the genomes of such animals.

We believe that our scientists are the first in the world to automate a process for the rapid production and analysis of gene trap events. We have also implemented integrated and automated procedures using computers and robotics to perform most of the DNA sequencing tasks. This integrated approach allows our scientists to move from human gene trap template or mouse ES cell clone to DNA sequence with speed and efficiency. We have also implemented a rapid method to clone and sequence full-length human genes from cDNA libraries that are discovered through our gene trapping technology.

Defining Gene Function. Mouse ES cells are cells that may be genetically manipulated using our gene trapping and gene targeting technologies. When the desired genetic changes have been introduced into the ES cells, clones of cells containing specific alterations in genes are selected and grown as colonies in vitro. These colonies each represent a new mouse clone with

a defined alteration in a specific gene and can be grown into knockout mice with the desired alteration. In this form, ES cell clones may be stored indefinitely in liquid nitrogen freezers.

We use our gene trapping retroviruses in an automated process to rapidly and cost-effectively create knockout mouse clones. Our OmniBank library presently contains more than 70,000 frozen ES cell clones identified by DNA sequence in a relational database. Importantly, our gene trapping vectors are designed to trap genes in a manner largely independent of their levels of expression, permitting even very rarely expressed genes to be included in our OmniBank database and library. We estimate that OmniBank currently contains genes that represent approximately one-third of the mammalian genome.

We are currently generating approximately 1,000 genetically engineered knockout ES cell clones per week using our technology. Our OmniBank library permits researchers to analyze gene function even without prior knowledge of the DNA sequence of the gene, permitting analysis of large numbers of knockout mice in order to discover those genes that are responsible for particular biological functions. We believe that this combination of gene trapping and large-scale ES cell cloning of the mouse will enable us and our collaborators to more rapidly discover those genes that are the most promising for development as drug targets and therapeutic proteins.

Complementing our OmniBank genome-wide knockout approach, we use technologies of gene targeting by a process called "homologous recombination" to generate custom knockout mice for the study of the functions of specific genes. These highly specific methods enable us to alter interesting genes for our focused drug discovery projects. We use a technology known as Cre/lox recombinase technology to selectively disrupt, or conditionally regulate, the functions of targeted genes in specific tissues of the mouse. We call these mice "conditional knockout mice." This conditional regulation of gene activity may closely model the pharmacological action of drugs that interact with specific targets.

We have developed a sophisticated series of tests, which we refer to as the Seek-Target-Validation program, to rapidly and systematically analyze large numbers of knockout mice to discover the function of genes. These tests are structured in three levels: primary biological analysis, organ and physiological systems analysis, and pathway discovery and analysis. These tests are stratified according to level of complexity required to obtain information regarding a particular function. Results obtained from tests at one level can serve to focus the types of tests applied at the next level of analysis. We apply these tests to specific knockout mice in a systematic fashion in order to reveal physiological, cellular and biochemical consequences of a specific gene knockout, thereby defining the function of the gene and the protein it encodes. Diseases and conditions that are being surveyed under this program include genes for obesity, anemia, immune disorders, inflammation, heart disease, diabetes, cancer, neurological diseases and behavioral defects. In 1999, we expended $14.6 million on company sponsored research and development activities. Our customer sponsored research and development expenditures in 1999 were immaterial.

COMMERCIALIZATION

Our commercialization strategy is to:

- expand our efforts to establish additional subscription agreements for access to our Human Gene Trap database and OmniBank database and library;
- enter into collaborations for the development and analysis of custom and OmniBank knockout mice;
- expand our e-Biology collaborations through Lexgen.com; and
- establish drug discovery and development collaborations with leading pharmaceutical and biotechnology companies.

Drug Target and Therapeutic Protein Discovery

Most human disease is associated with alterations in physiological processes controlled by genes and the proteins they encode. Virtually all drugs interact with proteins, commonly referred to as the drug's target. Some drugs, such as insulin and erythropoetin, are themselves protein products of genes. The discovery of genes within the human genome that encode novel proteins, therefore, represents an opportunity for the discovery and development of novel drug targets and therapeutic proteins that address medical needs for which there presently may be no effective treatment.

Drugs on the market today interact with a total of about 500 specific protein targets, each of which is encoded by the sequence of a gene. While estimates of the total number of potential drug targets encoded within the human genome vary widely, many experts believe that there may be between 5,000 and 10,000 such targets. The emergence of genomics, therefore, presents an opportunity for pharmaceutical companies to significantly expand the number of new targets available for drug discovery.

We believe our genomics and functional genomics resources will enable the discovery of a wide spectrum of potential pharmaceutical products. We are using these resources both to provide products and services to our collaborators and to drive our own discovery efforts. These efforts involve the following elements:

- computer analyses of our proprietary Human Gene Trap and OmniBank databases to prioritize genes for functional analysis;

- more in-depth computer, or bioinformatics, analysis and studies to determine tissues in which genes are expressed to prioritize a set of genes for full-length sequencing;

- internal and collaborative research programs analyzing the physiologic, cellular and biochemical consequences of the knockout of selected genes in mice; and

- identification of certain genes and the proteins encoded by such genes as promising drug targets or therapeutic proteins.

We anticipate that most of our pharmaceutical products may be developed and marketed in collaborative arrangements with pharmaceutical and biotechnology companies. We may, however, independently develop a select group of pharmaceutical products. We believe that the genes we identify and the gene functions we define have the potential to be valuable in the discovery and development of therapeutic proteins, antibody, small molecule and gene therapy drugs, diagnostics, and pharmacology and toxicology applications.

Collaborators, Customers and Programs

Millennium Pharmaceuticals, Inc. We established a collaboration for our Human Gene Trap and OmniBank databases with Millennium Pharmaceuticals, Inc. in October 1999. Under the agreement with Millennium, we provided Millennium with non-exclusive access to our Human Gene Trap and OmniBank databases through the initial term of the agreement, which will expire in April 2000. We received $2.25 million in access fees from Millennium for the initial term which constituted in excess of 10% of our revenues in 1999. Millennium has elected not to extend this agreement beyond its initial term. The database agreement was our second collaboration agreement with Millennium. We entered into a separate multi-year agreement in July 1999 for the creation of custom knockout mice for use by Millennium in the validation of potential drug targets identified and selected by Millennium.

Merck Genome Research Institute. We established an agreement for access to our OmniBank database and library with Merck Genome Research Institute in March 1997. We have agreed to develop 150 lines of knockout mice from OmniBank for payments totaling $8.0 million, of which $4.0 million has already been paid. The OmniBank mice produced under the agreement will be made available to researchers worldwide through one or more not-for-profit distributors selected by MGRI for that purpose. A committee of leading scientists appointed by MGRI selects the lines of OmniBank mice produced under the agreement. To date, the committee has selected 75 of the 150 lines of knockout mice to be produced under the agreement. The MGRI agreement continues until all 150 lines of knockout mice are delivered. MGRI has rights to terminate the agreement if we fail to achieve specified performance standards, and either party may terminate the agreement if the other party breaches its material obligations under the agreement.

OmniBank Internet Universal Program. The OmniBank Internet Universal program allows pharmaceutical and biotechnology companies to obtain non-exclusive access to our OmniBank database through the Internet. In addition, these agreements allow collaborators to obtain OmniBank and custom knockout mice under predefined terms. Pharmaceutical and biotechnology companies that identify drug targets of interest through either OmniBank or custom knockout mice also have the option to engage us to analyze those mice through our Seek-Target-Validation program. We receive annual subscription fees and fees for

knockout mice with annual minimum commitments and may receive royalties on products developed using novel genes discovered in OmniBank. We have entered into agreements with the following companies under this program:

COMPANY	DATE OF AGREEMENT	END OF ACCESS PERIOD
Boehringer Ingelheim Pharmaceuticals Inc. (a subsidiary of Boehringer Ingelheim GmBH, International)	February 2000	February 2003
G.D. Searle & Co. (a subsidiary of Monsanto Company)	January 2000	January 2003
The R.W. Johnson Pharmaceutical Research Institute* (a subsidiary of Johnson & Johnson)	December 1999	December 2001
N.V. Organon (a subsidiary of Akzo Nobel)	December 1999	December 2002
DuPont Pharmaceuticals Company (a subsidiary of E.I. du Pont de Nemours and Company)	July 1998	July 2001
ZymoGenetics, Inc. (a subsidiary of Novo Nordisk A/S)	December 1997	December 2000

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* includes Seek-Target-Validation analysis of knockout mice produced under this agreement

Agreements under this program continue until all projects initiated during the access period are completed. In general, the agreements may be terminated by either party if the other party breaches its material obligations under the agreement.

Lexgen.com and the e-Biology Global Collaboration Program. Finding the best targets for drug discovery among the estimated 100,000 genes contained in the human genome is a task of such complexity and scale that it will require the combined efforts of leading research scientists worldwide. The identification of drug targets and therapeutic proteins using our technology will require the application of in-depth scientific and medical knowledge to prioritize genes for functional studies and to execute those studies. Therefore, we believe that the magnitude of our OmniBank functional genomics resource uniquely enables global collaboration through the Internet to accelerate the discovery of gene function.

[Figure depicting Lexgen.com Internet exchange site]

Pictured above are screens from Lexgen.com, the Internet exchange where researchers search our OmniBank database.

Through Lexgen.com, our genomics Internet exchange, researchers at pharmaceutical companies, biotechnology companies and academic institutions worldwide subscribe to our OmniBank database. Lexgen.com allows subscribers to mine our OmniBank database for interesting genes and knockout mice through the use of our bioinformatics software. Our software uses a web interface to provide access in a relational database to OmniBank gene sequence information with similarity to publicly-available known genes, gene names and associated substance names. Our bioinformatics software also includes a powerful

abstract navigator that allows users to search through knockout mouse clones based on keywords and substance names that derive from the abstracts of relevant medical and scientific articles regarding genes with high similarity to OmniBank clones. For internal use, we also apply a wide variety of sophisticated bioinformatics algorithms to identify DNA sequence motifs that can yield clues as to gene function.

Subscribers to Lexgen.com can acquire OmniBank knockout mice on a non-exclusive basis and determine the function of genes under our e-Biology Global Collaboration program. In this program, we receive fees for OmniBank knockout mice and, with participating institutions, certain rights to license inventions or to receive royalties on pharmaceutical products discovered using our mice. In cases where we do not obtain such rights, our e-Biology collaborations leverage the value of OmniBank since we may also elect to pursue any clone acquired through that program for gene function research either on our own or with a commercial partner. We believe that Lexgen.com and our e-Biology collaborations will allow us to harvest high-value functional genomics information for application in drug discovery and facilitate collaborations between us and pharmaceutical and biotechnology companies. We have entered into agreements under our e-Biology Collaboration Program with researchers at the following institutions:

- - Beth Israel Deaconess Hospital
- - Brigham & Women's Hospital
- - The Burnham Institute
- - Catholic University (Belgium)
- - Cedars-Sinai Medical Center
- - Center for Advanced Biotechnology (Italy)
- - Center for Blood Research
- - Children's Hospital Research Foundation
- - Copenhagen University (Denmark)
- - DIBIT, H. San FaFaele (Italy)
- - Emory University
- - Georgetown University
- - Harvard Medical School
- - Indiana University
- - Institute for Genetic Medicine (Italy)
- - Max-Planck Institute (Germany)
- - Mt. Sinai School of Medicine
- - National CardioVascular Center
- - New York University
- - Odense University (Denmark)
- - Osaka University (Japan)
- - Sung Kyun Kwan University (Korea)
- - St. Louis University
- - Telethon Institute of Genetics and Medicine (Italy)
- - Tohoku University (Japan)
- - University of Bordeaux (France)
- - University of British Columbia (Canada)
- - University College London (U.K.)
- - Uniformed Services University
- - University of Miami
- - University of Pennsylvania
- - University of Texas Southwestern Medical Center
- - University of Utah
- - Washington University, St. Louis
- - Yale University

Custom Knockout Mouse Program. The Custom Knockout Mouse program involves our use of proprietary gene targeting technologies to rapidly produce custom knockout mice and conditional knockout mice for specific genes. We receive research fees for the creation of knockout mice under this program and, with participating institutions, certain rights to license inventions or royalties on products discovered using such mice. We have generated custom mice for or currently have custom mouse projects under contract with the following pharmaceutical and biotechnology companies and academic institutions:

- - BASF Bioresearch Corporation
- - Bayer Corporation
- - Baylor College of Medicine
- - Blood Research Institute of Wisconsin
- - Cedars-Sinai Medical Center
- - Cephalon Inc.
- - Children's Hospital Research Foundation
- - Elan Pharmaceuticals, Inc.
- - Genetics Institute (American Home Products)
- - Harvard University
- - H. Lundbeck A/S
- - Indiana University School of Medicine
- - Johns Hopkins University School of Medicine
- - Max Planck Institute
- - Merck & Co., Inc.
- - Millennium Pharmaceuticals, Inc.
- - Mount Sinai School of Medicine
- - New England Medical Center
- - Parke-Davis (Warner-Lambert Company)
- - Pennsylvania State University
- - Peptide Research Institute
- - Quark Biotech, Inc.
- - Roche BioSciences
- - Rockefeller University
- - Stanford University
- - Scripps Research Institute
- - Temple University

- - Tufts University School of Medicine
- - University College, London
- - University of California at Los Angeles
- - University of Florida
- - University of Marborg

- - University of Pennsylvania
- - University of Rochester
- - University of Southern California
- - University of Texas Medical Branch-Galveston
- - University of Virginia
- - University of Wisconsin, Madison
- - Virginia Commonwealth University
- - Wayne State University
- - Wyeth-Ayerst (American Home Products)

Significant Customers in 1999.

For the year ended December 31, 1999, Millennium Pharmaceuticals, Inc. and ZymoGenetics, Inc, represented 28% and 23% of our revenues, respectively. In December 1999 and January and February 2000 we entered into four additional agreements with pharmaceutical companies under our OmniBank Internet Universal Program. See "OmniBank Internet Universal Program."

PATENTS AND PROPRIETARY RIGHTS

We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that those rights are covered by valid and enforceable patents or are effectively maintained as trade secrets. Accordingly, patents and other proprietary rights are an essential element of our business. We seek patent protection for the genes, proteins and drug targets that we discover. Specifically, we seek patent protection for:

- the partial gene sequences contained in our Human Gene Trap and OmniBank databases that we believe to be novel;
- the sequences of full-length genes that we believe to be novel, the proteins they encode and their predicted utility as a drug target or therapeutic protein;
- the utility of genes and the proteins they encode using knockout mice to discover drug targets or therapeutic proteins based on our definition of their biological functions; and
- various enabling technologies in the fields of mutagenesis, ES cell manipulation and transgenic or knockout mice.

We own or have exclusive rights to three issued U.S. patents, which cover specific knockout mice and discoveries of the functions of genes made using knockout mice. We have licenses under 23 additional U.S. patents, and corresponding foreign patents and patent applications, in the fields of gene targeting, gene trapping and genetic manipulation of mouse ES cells. These include patents covering Cre/lox technology and the use of positive-negative selection and other methods of efficient homologous recombination. We have filed or have exclusive rights to 188 pending patent applications in the United States, the European Patent Office, the national patent offices of other foreign countries or under the Patent Cooperation Treaty, covering our gene trapping technology, the DNA sequences of genes and other products and processes. Patents typically have a term of no longer than 20 years from the date of filing.

All of our employees, consultants and advisors are required to execute a confidentiality agreement upon the commencement of employment or consultation. In general, the agreement provides that all inventions conceived by the employee or consultant, and all confidential information developed or made known to the individual during the term of the agreement, shall be our exclusive property and shall be kept confidential, with disclosure to third parties allowed only in specified circumstances. We cannot assure you, however, that these agreements will provide useful protection of our proprietary information in the event of unauthorized use or disclosure of such information.

COMPETITION

The biotechnology and pharmaceutical industries are highly competitive and characterized by rapid technological change. We face significant competition in each of the aspects of our business from for-profit companies such as Human Genome Sciences, Inc., Incyte Pharmaceuticals, Inc., Millennium Pharmaceuticals, Inc., Deltagen, Inc., DNX (a subsidiary of Phoenix International Life Sciences, Inc.) and Celera Genomics, among others, many of which have substantially greater financial, scientific and human resources than we do. In addition, the Human Genome Project and a large number of universities and other not-for-profit institutions, many of which are funded by the U.S. and foreign governments, are also conducting research to discover genes.

We face significant competition in our efforts to discover and patent genes from entities using high-throughput EST and genomic sequencing approaches, as well as from entities using more traditional methods to discover genes related to particular diseases. In addition, several genomics and bioinformatics companies, including Double Twist, Inc. (through its doubletwist.com Internet portal) and Hyseq Inc. (through its GeneSolutions.com website), provide bioinformatics-related products and services through the Internet which indirectly compete with the bioinformatics and gene discovery resources available through Lexgen.com.

While we are not aware of any other commercial or not-for-profit entity that is developing large-scale gene trap mutagenesis in ES cells, we face significant competition from entities using traditional knockout mouse technology and other technologies. Several companies and a large number of academic institutions create knockout mice for third parties using these methods, and a number of companies create knockout mice for use in their own research.

Many of our competitors in drug discovery and development have substantially greater research and product development capabilities and financial, scientific, marketing and human resources than we have. As a result, our competitors may succeed in developing products earlier than we do, obtaining approvals from the FDA or other regulatory agencies for those products more rapidly than we do, or developing products that are more effective than those we propose to develop. Similarly, our collaborators face similar competition from other competitors who may succeed in developing products more quickly, or developing products that are more effective, than those developed by our collaborators. We expect that competition in this field will intensify.

GOVERNMENT REGULATION

Regulation of Pharmaceutical Products

The development, production and marketing of any pharmaceutical products developed by us or our collaborators will be subject to extensive regulation by United States and foreign governmental authorities. In the United States, new drugs are subject to regulation under the Federal Food, Drug and Cosmetic Act and biological products are subject to regulation both under certain provisions of that Act and under the Public Health Services Act. The FDA regulates, among other things, the development, testing, manufacture, safety, efficacy, record keeping, labeling, storage, approval, advertising, promotion, sale and distribution of biologics and new drugs. The process of obtaining FDA approval has historically been costly and time-consuming.

The standard process required by the FDA before a pharmaceutical agent may be marketed in the United States includes:

- preclinical tests;

- submission to the FDA of an Investigational New Drug application, or IND, which must become effective before human clinical trials may commence;

- adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug or biologic in our intended application;

- for drugs, submission of a New Drug Application, or NDA, or a Biologic License Application, or BLA, with the FDA; and

- FDA approval of the NDA or BLA prior to any commercial sale or shipment of the drug.

In addition to obtaining FDA approval for each product, each drug manufacturing establishment must be inspected and approved by the FDA. All manufacturing establishments are subject to inspections by the FDA and by other federal, state and local agencies and must comply with current Good Manufacturing Practices requirements.

The preclinical studies can take several years to complete, and there is no guarantee that an IND based on those studies will become effective to even permit clinical testing to begin. Once clinical trials are initiated, they generally take two to five years, but may take longer, to complete. After completion of clinical trials of a new drug or biologic product, FDA marketing approval of the NDA or BLA must be obtained. This process requires substantial time and effort and there is no assurance that the FDA will accept the NDA or BLA for filing and, even if filed, that approval will be granted. In the past, the FDA's approval of the NDA or BLA has taken, on average, two to five years; if questions arise, approval can take more than five years.

In addition to regulatory approvals that must be obtained in the United States, a drug product is also subject to regulatory approval in other countries in which it is marketed, although the requirements governing the conduct of clinical trials, product licensing, pricing, and reimbursement vary widely from country to country. No action can be taken to market any drug product in a country until an appropriate application has been approved by the regulatory authorities in that country. FDA approval does not assure approval by other regulatory authorities. The current approval process varies from country to country, and the time spent in gaining approval varies from that required for FDA approval. In some countries, the sale price of a drug product must also be approved. The pricing review period often begins after market approval is granted. Even if a foreign regulatory authority approves a drug product, it may not approve satisfactory prices for the product.

Other Regulations

In addition to the foregoing, our business is and will be subject to regulation under various state and federal environmental laws, including the Occupational Safety and Health Act, the Resource Conservation and Recovery Act and the Toxic Substances Control Act. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in and wastes generated by our operations. We believe that we are in material compliance with applicable environmental laws and that our continued compliance with these laws will not have a material adverse effect on our business. We cannot predict, however, whether new regulatory restrictions on the production, handling and marketing of biotechnology products will be imposed by state or federal regulators and agencies or whether existing laws and regulations will not adversely affect us in the future.

PROPERTIES

We currently lease approximately 63,000 square feet of space for our corporate offices and laboratories in a building located at 4000 Research Forest Drive in The Woodlands, Texas, a suburb of Houston, Texas. Our facilities at this location include a 28,000 square foot state-of-the art animal facility completed in January 1999. We believe this is one of the largest facilities in the world dedicated to the generation and analysis of knockout mice. Pursuant to the lease, monthly payments of $98,000, increasing over time, are required for base rent through the expiration of the lease in 2013. We have options to lease additional property that is contiguous to our existing location. We intend to exercise these options as appropriate to accommodate our anticipated growth.

LEGAL PROCEEDINGS

We are not a party to any material legal proceedings.

EMPLOYEES AND CONSULTANTS

We believe that our success will be based on, among other things, achieving and retaining scientific and technological superiority and identifying and retaining capable management. We have assembled a highly qualified team of scientists as well as executives with extensive experience in the biotechnology industry.

As of March 15, 2000, we employed 127 persons, of whom 22 hold M.D., Ph.D. or D.V.M. degrees and 16 hold other advanced degrees. We believe that our relationship with our employees is good.

SCIENTIFIC ADVISORY PANEL MEMBERS

We have consulting relationships with a number of scientific advisors, organized into panels focused on specific human diseases or conditions. At our request, these advisors review the feasibility of product development programs under consideration, provide advice concerning advances in areas related to our technology and aid in recruiting personnel. Most of these advisors receive cash and stock-based compensation for their services, as well as access to our OmniBank database and mice from our OmniBank library. All of the advisors are employed by academic institutions or other entities and may have commitments to or advisory agreements with other entities that may limit their availability to us. Our advisors are required to disclose and assign to us any ideas, discoveries and inventions they develop in the course of providing consulting services to us. We also use consultants for various administrative needs. None of our consultants or advisors is otherwise affiliated with us. Our scientific advisors and consultants include the following persons:

NAME	AFFILIATION	TITLE
AGING AND CANCER PANEL		
Carlo M. Croce, M.D.	Thomas Jefferson University	Director, Kimmel Cancer Center
Richard Fishel, Ph.D.	Thomas Jefferson University	Professor of Microbiology and Immunology
H. Earl Ruley, Ph.D.	Vanderbilt University	Professor, Department of Microbiology and Immunology

NAME	AFFILIATION	TITLE
METABOLISM, DIABETES AND OBESITY		
Qais Al-Awqati, M.D.	Columbia University	Professor of Medicine and Physiology
Tom Coffman, M.D.	Duke University Medical Center	Professor of Medicine
Wolf-Georg Forsmann, M.D., Ph.D.	Neidersachsisches Institut fur Peptid-Forschung	
Oliver Smithies, Ph.D.	University of North Carolina at Chapel Hill	Excellence Professor, Department of Pathology and Laboratory Medicine
Kenneth Heskel Gabbay, M.D.	Baylor College of Medicine	Head, Section of Molecular Diabetes and Metabolism, Department of Pediatrics
GENOMICS AND BIOINFORMATICS		
Eric Douglas Green, M.D., Ph.D.	National Human Genome Research Institute	Chief, Genome Technology Branch
Gregory D. Schuler, Ph.D.	National Center for Biotechnology Information	Staff Scientist
Steven R. Gullans, Ph.D.	Harvard Institutes of Medicine	Associate Professor of Medicine
Paul S. Meltzer, M.D., Ph.D.	National Human Genome Research Institute	Head, Section of Molecular Genetics, Cancer Genetics Branch
William R. Pearson, Ph.D.	University of Virginia	Professor of Biochemistry
NEUROLOGY AND DEGENERATIVE DISORDERS		
Robert Edwards, M.D.	University of California San Francisco	Professor, Departments of Neurology and Physiology
Rudolph E. Tanzi, Ph.D.	Harvard Medical School	Associate Professor of Neurology (Neuroscience)
Jeffrey L. Noebels, M.D., Ph.D.	Baylor College of Medicine	Professor, Department of Neurology
Laurence Tecott, M.D., Ph.D.	University of California San Francisco	Assistant Professor, Department of Psychiatry

MANAGEMENT

EXECUTIVE OFFICERS AND DIRECTORS

NAME	AGE	POSITION
Arthur T. Sands, M.D., Ph.D.	38	President and Chief Executive Officer and Director
Julia P. Gregory	47	Executive Vice President and Chief Financial Officer
Jeffrey L. Wade, J.D.	35	Executive Vice President and General Counsel
James R. Piggott, Ph.D.	45	Senior Vice President of Pharmaceutical Biology
Randall B. Riggs	33	Senior Vice President of Business Development
Brian P. Zambrowicz, Ph.D.	37	Senior Vice President of Genomics
Lance K. Ishimoto, J.D., Ph.D.	40	Vice President of Intellectual Property
Christophe Person	33	Vice President of Informatics
Ray B. Webb	54	Vice President of Finance and Administration
C. Thomas Caskey, M.D.	61	Chairman of the Board of Directors
William A. McMinn	69	Director
Stephen J. Banks	59	Director
Sam L. Barker, Ph.D.	57	Director
Gordon A. Cain	87	Director
Patricia M. Cloherty	57	Director
Paul Haycock, M.D.	53	Director

Arthur T. Sands, M.D., Ph.D. co-founded our company and has been our President and Chief Executive Officer and a director since September 1995. From 1992 to September 1995, Dr. Sands served as an American Cancer Society postdoctoral fellow in the Department of Human and Molecular Genetics at Baylor College of Medicine, where he studied the function of the p53 gene in cancer formation and created the XPC knockout mouse, a model for skin cancer. He received his B.A. in Economics and Political Science from Yale University and his M.D. and Ph.D. from Baylor College of Medicine.

Julia P. Gregory has been our Executive Vice President and Chief Financial Officer since February 2000. Since 1998, Ms. Gregory has served as the Head of Investment Banking for Punk, Ziegel & Company, L.P. and since 1996, the Head of the firm's Life Sciences practice. From 1980 to 1996, Ms. Gregory was an investment banker with Prime Charter Ltd. and then Dillon, Read & Co., Inc. She has represented life sciences companies since 1986. Ms. Gregory is a member of the Emerging Companies Section Governing Body of the Biotechnology Industry Organization and a member of the Executive Committee of the Lauder Foundation's Institute for the Study of Aging, Inc. She received her B.A. in International Affairs from George Washington University and her M.B.A. from the Wharton School of the University of Pennsylvania.

Jeffrey L. Wade, J.D. has been our Executive Vice President and General Counsel since February 2000 and was our Senior Vice President and Chief Financial Officer from January 1999 to February 2000. From 1988 through December 1998, Mr. Wade was a corporate securities and finance attorney with the law firm of Andrews & Kurth L.L.P., for the last two years as a partner, where he represented companies in the biotechnology, information technology and energy industries. Mr. Wade is a member of the boards of directors of the Texas Healthcare and Bioscience Institute and the Texas Life Sciences Foundation. He received his B.A. and J.D. from The University of Texas.

James R. Piggott, Ph.D. has been our Senior Vice President of Pharmaceutical Biology since January 2000. From 1990 through October 1999, Dr. Piggott worked for ZymoGenetics, Inc., a subsidiary of Novo Nordisk, most recently as Senior Vice President--Research Biology. Dr. Piggott's pharmaceutical research experience also includes service at the Smith Kline & French Laboratories Ltd. unit of SmithKline Beecham plc and the G.D. Searle & Co. unit of Monsanto Company. Dr. Piggott received his B.A. and Ph.D. from Trinity College, Dublin.

Randall B. Riggs has been our Senior Vice President of Business Development since February 2000 and served as our Vice President of Business Development from December 1998 to February 2000. From January through November 1998, Mr. Riggs was director of Business Development for the Infectious Disease Business Unit of GENEMEDICINE, INC. From 1992 to January 1998, Mr. Riggs was employed by Eli Lilly and Company, for the last two years as Manager, Corporate Business Development at Eli Lilly's Indianapolis, Indiana headquarters. Before joining Eli Lilly, Mr. Riggs' experience included service as a business analyst for the National Aeronautics and Space Administration and a subsidiary of Amoco Production Company. He received his B.B.A. from Texas A&M University and his M.B.A. from The University of Houston.

Brian P. Zambrowicz, Ph.D. has been our Senior Vice President of Genomics since February 2000. Dr. Zambrowicz served as our Vice President of Research from January 1998 to February 2000 and as Senior Scientist from April 1996 to January 1998. From 1993 to April 1996, Dr. Zambrowicz served as an NIH postdoctoral fellow at The Fred Hutchinson Cancer Center in Seattle, Washington, where he studied gene trapping and gene targeting technology. Dr. Zambrowicz received his B.S. in Biochemistry from the University of Wisconsin. He received his Ph.D. from the University of Washington, where he studied tissue-specific gene regulation using transgenic mice.

Lance K. Ishimoto, J.D., Ph.D. has been our Vice President of Intellectual Property since July 1998. From 1994 to July 1998, Dr. Ishimoto was a biotechnology patent attorney at the Palo Alto, California office of Pennie & Edmonds LLP. Dr. Ishimoto received his B.A. and Ph.D. from U.C.L.A., where he studied molecular mechanisms of virus assembly and the regulation of virus ultrastructure. After receiving his Ph.D., Dr. Ishimoto served as an NIH postdoctoral fellow at University of Washington School of Medicine. He received his J.D. from Stanford University.

Christophe Person has been our Vice President of Informatics since November 1999 and served as our Director of Informatics from May 1997 to November 1999. From 1994 to May 1997, Mr. Person was the Senior Scientific Programmer for the Center for Theoretical Neurosciences at Baylor College of Medicine. From 1990 to 1994, Mr. Person was the CEPH Database Manager at the Human Polymorphism Studies Center in Paris, France. Mr. Person received his degree in Electrical Engineering from Groupe ESTE/ESIEE (Ecole Superieure de Technologie Electronique/Ecole Superieure d'Ingenieurs en Electrotechnique et Electronique).

Ray B. Webb has been our Vice President of Finance and Administration since January 1998 and was Director of Finance and Administration from September 1995 to January 1998. Before joining us, Mr. Webb was Director of Finance and Administration of Triplex Pharmaceutical Corporation, a biotechnology company founded out of Baylor College of Medicine, from 1989 until its merger with Aronex Pharmaceuticals, Inc. in 1995. He received his B.A. in Economics and Political Science from Brigham Young University.

C. Thomas Caskey, M.D. became Chairman of the Board of Directors in April 2000. Dr. Caskey served as Senior Vice President, Research at Merck Research Laboratories from 1995 to March 2000 and as President of the Merck Genome Research Institute from 1996 to March 2000. Before joining Merck, Dr. Caskey served 25 years at Baylor College of Medicine in a series of senior positions, including Chairman, Department of Human and Molecular Genetics and Director, Human Genome Center. He is a member of the National Academy of Science. Dr. Caskey received his B.A. from the University of South Carolina and his M.D. from Duke University Medical School.

William A. McMinn has been a director since September 1997 and was the Chairman of the Board of Directors from July 1999 until April 2000. Mr. McMinn has served as Chairman of the Board of Texas Petrochemicals Corporation since 1996. He was Corporate Vice President and Manager of the Industrial Chemical Group of FMC Corporation, a manufacturer of machinery and chemical products, from 1973 through 1985. He became President and Chief Executive Officer of Cain Chemical Inc. in 1987, and served in that capacity until its acquisition by Occidental Petroleum in May 1988. He became Chairman of the board of directors of Arcadian Corporation in August 1990 and served in that capacity until it was sold in April 1997. Mr. McMinn received his B.S. from Vanderbilt University.

Stephen J. Banks has been a director since our inception in September 1995. Mr. Banks has served as President of BCM Technologies, Inc., Baylor College of Medicine's technology transfer subsidiary, since January 1988. Mr. Banks was employed with The Hillman Company from 1969 to 1987 and was Vice President from 1980 to 1987, with responsibility for venture capital activities. He is a director of BCM Technologies, several private companies and Lark Technologies, Inc., a publicly-held company. He also serves as an Adjunct Professor of Administration at Rice University. Mr. Banks received his B.S. in Physics from Massachusetts Institute of Technology and his M.B.A. from Harvard Graduate School of Business Administration.

Sam L. Barker, Ph.D. has been a director since March 2000. Dr. Barker served in a series of senior domestic and international management positions at Bristol-Myers Squibb until his retirement in 1998. His positions at Bristol-Myers Squibb included service as Executive Vice President, Worldwide Franchise Management and Strategy during 1998, President, U.S. Pharmaceutical Group from 1995 to 1997 and President, U.S. Pharmaceuticals from 1992 to 1995. Dr. Barker received his B.S. from Henderson State College, his M.S. from the University of Arkansas and his Ph.D. from Purdue University.

Gordon A. Cain has been a director since September 1995 and served as Chairman of our board of directors from September 1995 until July 1999. Mr. Cain also serves as Chairman of the Board of Agennix Inc., another biotechnology company in which he is a principal investor. From August 1982 until his retirement in December 1992, he was Chairman of the Board of The Sterling Group, Inc. Mr. Cain was the Chairman of the Board of Sterling Chemicals, Inc. from 1986 until it was sold in August 1996 and was a member of the board of directors of Arcadian Corporation from May 1989 until it was sold in April 1997.

Prior to organizing The Sterling Group, Mr. Cain was involved in the purchase of a variety of businesses and provided consulting services to these and other companies. Mr. Cain was also Chairman of the Board of UltraAir, Inc. from 1991 to 1994, Chairman of the Board of Cain Chemical Inc. from its organization in March 1987 until its acquisition by Occidental Petroleum Corporation in May 1988 and the Chairman of the Board of Vista Chemical Company from 1984 until 1986. Mr. Cain presently serves as a director of Texas Petrochemicals Corporation. He received a B.S. in Chemical Engineering from Louisiana State University.

Patricia M. Cloherty has been a director since May 1998. Ms. Cloherty is a Special Limited Partner of Patricof & Co. Ventures, Inc., a venture capital company. From 1988 through 1999, she was General Partner and, successively, Senior Vice President, President and Co-Chairman of that company. Ms. Cloherty served as deputy administrator of the U.S. Small Business Administration from 1977 to 1978 and has served as Chairman of the U.S. Russia Investment Fund since 1995. She is past president and chairman of the National Venture Capital Association. Ms. Cloherty serves as a director of Diversa Corporation and several private companies. She holds a B.A. from the San Francisco College for Women and an M.A. and an M.I.A. from Columbia University.

Paul Haycock, M.D. has been a director since May 1998. Dr. Haycock has been a director of Apax Partners & Co., a U.K. venture investment company since 1996. From January 1992 to October 1996, Dr. Haycock was Chief Executive of Cantab Pharmaceuticals, a public biotechnology company quoted on Nasdaq and the London Stock Exchange. Prior to such time, Dr. Haycock held various positions in the pharmaceutical and biotechnology industries, including the managing directorships of Duphar Laboratories and Novo-Laboratories U.K. and senior medical and management positions in Europe and the United States with NovoIndustri A/S and Squibb-Novo Inc. Dr. Haycock graduated in medicine from London University and completed post-graduate studies at the University of British Columbia, and holds a diploma in pharmaceutical medicine and an M.B.A. from the Cranfield School of Management.

BOARD COMPOSITION

We currently have eight directors. Upon the closing of this offering the terms of office of the board of directors will be divided into three classes. As a result, a portion of our board of directors will be elected each year. The division of the three classes, the initial directors and their respective election dates are as follows:

- the class I directors will be Stephen J. Banks and Paul Haycock, M.D. and their term will expire at the annual meeting of stockholders to be held in 2001;

- the class II directors will be Sam L. Barker, Ph.D., Patricia M. Cloherty and Gordon A. Cain and their term will expire at the annual meeting of stockholders to be held in 2002; and

- the class III directors will be C. Thomas Caskey, M.D., William A. McMinn and Arthur T. Sands, M.D., Ph.D. and their term will expire at the annual meeting of stockholders to be held in 2003.

At each annual meeting of stockholders after the initial classification, the successors to directors whose terms are to expire will be elected to serve from the time of election and qualification until the third annual meeting following election. The authorized number of directors may be changed only by resolution of the board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of the board of directors may have the effect of delaying or preventing changes in control or management of our company.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During 1999, Paul Haycock, M.D., Stephen J. Banks and Patricia M. Cloherty served as members of the compensation committee of our board of directors. No member of the compensation committee serves as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving as a member of our board of directors or compensation committee. Prior to the formation of the compensation committee in January 1999, our board of directors as a whole made decisions relating to compensation of our executive officers.

BOARD COMMITTEES

Audit Committee. Our audit committee reviews our internal accounting procedures and consults with, and reviews the services provided by, our independent public accountants. Current members of our audit committee are William A. McMinn, Stephen J. Banks and Patricia M. Cloherty.

Compensation Committee. Our compensation committee reviews and recommends to the board of directors the compensation and benefits of all our officers and reviews general policy relating to compensation and benefits of our employees. The compensation committee also administers the issuance of stock options and other awards under our stock plans. Current members of the compensation committee are Paul Haycock, M.D., Stephen J. Banks and Patricia M. Cloherty.

DIRECTOR COMPENSATION

Directors currently receive no cash compensation from us for their services as members of the board or for attendance at committee meetings. Directors may be reimbursed for expenses in connection with attendance at board of directors and committee meetings.

In February 2000, we adopted the 2000 non-employee directors' stock option plan to provide for the automatic grant of options to purchase shares of common stock to our directors who are not employees of us or of any of our affiliates. Any non-employee director elected after the closing of this offering will receive an initial option to purchase 30,000 shares of common stock. Starting at the annual stockholder meeting in 2001, all non-employee directors will receive an annual option to purchase 6,000 shares of common stock. All options granted under the non-employee directors' plan will have an exercise price equal to the fair market value of our common stock on the date of grant. See "--Employee Benefit Plans--2000 Non-Employee Directors' Stock Option Plan" for a more detailed explanation of the terms of these stock options.

LIMITATION OF DIRECTORS' AND OFFICERS' LIABILITY

Our amended and restated certificate of incorporation and bylaws provide that we will indemnify our directors and officers and may indemnify our other employees and other agents to the fullest extent permitted by Delaware law. We may also enter into indemnification contracts with our directors and officers and purchase insurance on behalf of any person we are required or permitted to indemnify. We have entered into indemnification agreements with each of our directors and officers.

We intend to obtain officer and director liability insurance to cover liabilities our officers and directors may incur in connection with their services to us, including matters arising under the federal securities laws. In addition, our amended and restated certificate of incorporation provides that, to the fullest extent permitted by Delaware law, our directors will not be liable for monetary damages for breach of the directors' fiduciary duty of care to us and our stockholders. This provision does not eliminate the duty of care, and in appropriate circumstances, equitable remedies including an injunction or other forms of non-monetary relief would remain available under Delaware law. Under current Delaware law, a director's liability to us or our stockholders may not be limited:

- for any breach of the director's duty of loyalty to our company or our stockholders;
- for acts or omissions not in good faith or involving intentional misconduct;
- for knowing violations of law;
- for any transaction from which the director derived an improper personal benefit;
- for improper transactions between the director and our company; or
- for improper distributions to stockholders and loans to directors and officers.

This provision also does not affect a director's responsibilities under any other laws, including the federal securities laws and state and federal environmental laws.

There is no pending litigation or proceeding involving any of our directors or officers as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

EXECUTIVE COMPENSATION

The following table presents summary information for the year ended December 31, 1999, regarding the compensation of each of our most highly compensated executive officers.

Summary Compensation Table

NAME AND POSITION	YEAR	ANNUAL COMPENSATION SALARY	ANNUAL COMPENSATION BONUS	LONG-TERM COMPENSATION AWARDS SECURITIES UNDERLYING OPTIONS
Arthur T. Sands, M.D., Ph.D. President, Chief Executive Officer and Director	1999	$200,000	$50,000	--
Jeffrey L. Wade, J.D. Executive Vice President and General Counsel	1999	$170,000	$25,000	390,000
Randall B. Riggs Senior Vice President of Business Development	1999	$160,000	--	270,000
Brian P. Zambrowicz, Ph.D. Senior Vice President of Genomics	1999	$175,000	--	--
Lance K. Ishimoto, J.D., Ph.D. Vice President of Intellectual Property	1999	$160,000	--	--

Option Grants in 1999

The following table presents each grant of stock options in 1999 to each of the individuals listed in the summary compensation table.

NAME	NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED	PERCENTAGE OF TOTAL OPTIONS GRANTED IN 1999	EXERCISE PRICE PER SHARE	EXPIRATION DATE	POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR OPTION TERM 5%	POTENTIAL REALIZABLE VALUE AT ASSUMED ANNUAL RATES OF STOCK PRICE APPRECIATION FOR OPTION TERM 10%
Arthur Sands, M.D., Ph.D.	--	--	--	--	--	--
Jeffrey L. Wade, J.D.	390,000	36.6%	$2.50	1/13/2009	$613,172	$1,553,899
Randall B. Riggs	270,000	25.4%	$2.50	1/13/2009	$424,504	$1,075,776
Brian P. Zambrowicz, Ph.D.	--	--	--	--	--	--
Lance K. Ishimoto, J.D., Ph.D.	--	--	--	--	--	--

The exercise price of each option was equal to the fair market value of our common stock as determined by the board of directors on the date of grant. In determining the fair market value of our common stock on the date of grant our board of directors considered many factors, including:

- the option grants involved illiquid securities in a nonpublic company;
- prices of preferred stock issued by us to outside investors in arm's-length transactions;
- the rights, preferences and privileges of the preferred stock over the common stock;
- our performance and operating results at the time of grant;
- our stage of development and business strategy; and
- the likelihood of achieving a liquidity event for the shares of common stock underlying these options, such as an initial public offering or a sale of our company.

The exercise price for each option may be paid in cash, promissory notes, in shares of our common stock valued at fair market value on the exercise date or through a cashless exercise procedure involving a same-day sale of the purchased shares.

The potential realizable value of these options is calculated based on the ten-year term of the option at the time of grant. Stock price appreciation of 5% and 10% is assumed pursuant to rules promulgated by the SEC and does not represent our prediction of our stock price performance.

Percentages shown under "Percentage of Total Options Granted in 1999" are based on an aggregate of 1,064,700 options granted to our employees, consultants and directors under our stock option plans during 1999.

Option Values at December 31, 1999

The following table presents the number and value of securities underlying unexercised options that are held by each of the individuals listed in the Summary Compensation Table as of December 31, 1999. No shares were acquired on the exercise of stock options by these individuals during the year ended December 31, 1999.

Amounts shown under the column "Value of Unexercised In-the-Money Options at December 31, 1999" are based on the assumed initial public offering price of $23.00 per share, without taking into account any taxes that may be payable in connection with the transaction, multiplied by the number of shares underlying the option, less the exercise price payable for these shares.

	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT DECEMBER 31, 1999		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT DECEMBER 31, 1999	
NAME	EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
Arthur T. Sands, M.D., Ph.D.	1,195,035	724,965	$26,458,750	$14,951,250
Jeffrey L. Wade, J.D.	97,500	292,500	$ 1,930,362	$ 6,064,638
Randall B. Riggs	67,500	202,500	$ 1,383,689	$ 4,151,312
Brian P. Zambrowicz, Ph.D.	325,644	364,386	$ 7,481,340	$ 7,012,260
Lance K. Ishimoto, J.D., Ph.D.	37,191	67,809	$ 762,416	$ 1,390,085

EMPLOYMENT AGREEMENTS

In October 1999, we entered into an employment agreement with Arthur T. Sands, M.D., Ph.D., our President and Chief Executive Officer. Under the agreement, Dr. Sands receives a base salary of $200,000 a year, subject to adjustment, with an annual discretionary bonus based upon specific objectives to be determined by the compensation committee. Dr. Sands' current annual salary is $250,000. The employment agreement is at-will and contains a non-competition agreement. The agreement also provides that if we terminate Dr. Sands' employment without cause or Dr. Sands voluntarily terminates his employment for good reason, we will pay him his then-current salary for 12 months.

In February 2000, we entered into an employment agreement with Julia P. Gregory to serve as our Executive Vice President and Chief Financial Officer starting in February 2000. Under the agreement, Ms. Gregory receives a base salary of $200,000 a year, subject to adjustment, with an annual discretionary bonus based upon specific objectives to be determined by the compensation committee. The employment agreement is at-will and contains a non-competition agreement. The agreement also provides that during the first year, if we terminate Ms. Gregory's employment without cause or Ms. Gregory voluntarily terminates her employment for good reason, we will pay her then-current salary for twelve months; if we terminate Ms. Gregory's employment without cause or Ms. Gregory voluntarily terminates her employment for good reason after such time, we will pay her then-current salary for six months. If any such termination follows a change in control of our company, we will pay Ms. Gregory her then-current salary for 12 months.

In December 1998, we entered into an employment agreement with Jeffrey L. Wade, J.D. to serve as our Senior Vice President and Chief Financial Officer starting in January 1999. In February 2000, Mr. Wade was named Executive Vice President and General Counsel. Under the agreement, Mr. Wade receives a base salary of $170,000 a year, subject to adjustment, with an annual discretionary bonus based upon specific objectives to be determined by the compensation committee. Mr. Wade's current annual salary is $190,000. The employment agreement is at-will and contains a non-competition agreement. The agreement also provides that if we terminate Mr. Wade's employment without cause or Mr. Wade voluntarily terminates his employment for good reason, we will pay him his then-current salary for six months. If any such termination follows a change in control of our company, we will pay Mr. Wade his then-current salary for 12 months.

In December 1998, we entered into an employment agreement with Randall B. Riggs to serve as our Vice President of Business Development. In February 2000, Mr. Riggs was named Senior Vice President of Business Development. Under the

agreement, Mr. Riggs receives a base salary of $160,000 a year, subject to adjustment, with an annual discretionary bonus based upon specific objectives to be determined by the compensation committee. Mr. Riggs's current annual salary is $180,000. The employment agreement is at-will and contains a non-competition agreement. The agreement also provides that if we terminate Mr. Riggs's employment without cause or Mr. Riggs voluntarily terminates his employment for good reason, we will pay him his then-current salary for six months. If any such termination follows a change in control of our company, we will pay Mr. Riggs his then-current salary for 12 months.

In January 2000, we entered into an employment agreement with James R. Piggott, Ph.D. to serve as our Senior Vice President of Pharmaceutical Biology. Under the agreement, Dr. Piggott receives a base salary of $200,000 a year, subject to adjustment, with an annual discretionary bonus based upon specific objectives to be determined by the compensation committee. The employment agreement is at-will and contains a non-competition agreement. The agreement also provides that if we terminate Dr. Piggott's employment without cause or Dr. Piggott voluntarily terminates his employment for good reason, we will pay him his then-current salary for six months. If any such termination follows a change in control of our company, we will pay Dr. Piggott his then-current salary for 12 months.

In February 2000, we entered into an employment agreement with Brian P. Zambrowicz, Ph.D., our Senior Vice President of Genomics. Under the agreement, Dr. Zambrowicz receives a base salary of $200,000 a year, subject to adjustment, with an annual discretionary bonus based upon specific objectives to be determined by the compensation committee. The employment agreement is at-will and contains a non-competition agreement. The agreement also provides that if we terminate Dr. Zambrowicz employment without cause or Dr. Zambrowicz voluntarily terminates his employment for good reason, we will pay him his then-current salary for six months. If any such termination follows our change in control, we will pay Dr. Zambrowicz his then-current salary for 12 months.

EMPLOYEE BENEFIT PLANS

2000 Equity Incentive Plan

We adopted our 2000 Equity Incentive Plan in February 2000. The 2000 Equity Incentive Plan is an amendment and restatement of our 1995 Stock Option Plan and will terminate in 2010 unless the board terminates it sooner. The 2000 Equity Incentive Plan provides for the grant of incentive stock options to employees and nonstatutory stock options to our employees, directors and consultants and our affiliates. The plan also provides for stock bonuses and restricted stock purchase awards. Incentive stock options will have an exercise price of 100% or more of the fair market value of our common stock on the date of grant. Nonstatutory stock options may have an exercise price as low as 85% of fair market value on the date of grant. The purchase price of other stock awards may not be less than 85% of fair market value. However, the board may award stock bonuses in consideration of past services without a purchase payment. Shares may be subject to a repurchase option in the discretion of the board. The 2000 Equity Incentive Plan provides that it will be administered by the board, or a committee appointed by the board, which determines recipients and types of options to be granted, including number of shares under the option and the exercisability of the shares.

Shares Reserved. We have reserved an aggregate of 11,250,000 shares of our common stock for issuance under the 2000 Equity Incentive Plan. On January 1 of each year for ten years, beginning in 2001, the number of shares reserved for issuance under the 2000 Equity Incentive Plan will be automatically increased by the greater of:

- 5% of our outstanding shares on a fully-diluted basis; or

- that number of shares that could be issued under awards granted under the incentive plan during the prior 12-month period.

The total number of shares reserved for issuance under the 2000 Equity Incentive Plan may not exceed 60,000,000 shares over the ten-year period.

Effect of Merger on Options. If we dissolve or liquidate, then outstanding options will terminate immediately prior to the event. If we sell, lease or dispose of all or substantially all of our assets, or are acquired pursuant to a merger or consolidation, all outstanding options will become immediately vested and exercisable in full.

Options Issued. As of March 15, 2000, options to purchase 8,473,134 shares of common stock were outstanding under the equity incentive plan and options for 344,865 shares had been exercised.

2000 Non-Employee Directors' Stock Option Plan

In February 2000, the board of directors adopted the 2000 Non-Employee Directors' Stock Option Plan to provide for the automatic grant of options to purchase shares of common stock to our non-employee directors. The board of directors administers the plan, unless it delegates administration to a committee.

Shares Reserved. We have reserved a total of 600,000 shares of our common stock for issuance under the directors' plan. On the day after each annual meeting of our stockholders, for 10 years, starting in 2001, the total number of shares reserved for issuance under the non-employee directors' plan will be increased by a number of shares equal to the greater of:

- 0.3% of our outstanding shares on a fully-diluted basis; or

- that number of shares that could be issued under options granted under the directors' plan during the prior 12-month period.

If an optionholder does not purchase the shares under the option before the option expires or otherwise terminates, the shares that are not purchased again become available for issuance under the non-employee directors' plan.

Initial Grants. Each person who is first elected or appointed as a non-employee director after our initial public offering will automatically receive an option for 30,000 shares, effective on the later of the approval of the non-employee directors' plan by the stockholders at the annual meeting or the date the director first becomes a member of our board.

Annual Grants. In addition, on the date of each of our annual meetings of stockholders, beginning with the annual meeting in 2000, each non-employee director who has been a director for at least six months will automatically be granted an option to purchase 6,000 shares of common stock.

Vesting and Exercise Terms. Initial option grants under the non-employee directors' plan will vest and become exercisable over a period of five years. Annual option grants will vest and become exercisable during the year following the grant. All options granted under the non-employee directors' plan will have an exercise price equal to the fair market value of our common stock on the date of grant. The option term is ten years.

Effect of a Merger on Options. If we dissolve or liquidate, outstanding options will terminate immediately prior to the event. If we sell, lease or dispose of all or substantially all of our assets, or are acquired pursuant to a merger or consolidation, the surviving entity will either assume or replace all outstanding options under the 2000 Non-Employee Directors' Stock Option Plan. If it declines to do so, all outstanding options will become immediately vested and exercisable in full. If an option is assumed or replaced but the option holder is not elected to the board of directors of the acquiring or surviving corporation at the first meeting of the board after the event, the vesting of that option will accelerate by 18 months.

Options Issued. The non-employee directors' plan will not be effective until the closing of the initial public offering of our stock. Therefore, we have not issued any options under the directors' plan.

Other Plans

We maintain a retirement and deferred savings plan for our employees that is intended to qualify as a tax-qualified plan under the Internal Revenue Code. The 401(k) Plan provides that each participant may contribute up to a statutory limit, which was $10,000 in 1999. In addition, we have a profit sharing plan pursuant to which we may grant cash bonuses out of our profits to our employees.

TRANSACTIONS WITH EXECUTIVE OFFICERS, DIRECTORS AND FIVE PERCENT STOCKHOLDERS

From January 1, 1997 through March 15, 2000, the following executive officers, directors or holders of more than five percent of our voting securities purchased securities in the amounts as of the dates shown below.

NAME	DATE(S) PURCHASED	COMMON STOCK	PRICE PER SHARE
Gordon A. Cain	1/97 - 7/97	1,770,000	$1.67
William A. McMinn	8/97	135,000(1)	--
Patricof & Co. Ventures Inc.	5/98	3,000,000(2)	$2.50
Apax Partners & Co.	5/98	3,000,000(2)	$2.50

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(1) Represents a warrant to purchase common stock at a price of $2.50 per share. Please read "--Indebtedness to Director" below.

(2) Represents shares of common stock that will be issued upon the conversion of 1,000,000 shares of series A convertible preferred stock concurrent with the closing of this offering.

We have entered into the following agreements with our executive officers, directors and holders of more than five percent of our voting securities.

Amended and Restated Registration Rights Agreement. The stockholders described above have entered into an agreement with us, pursuant to which these and other stockholders will have registration rights with respect to their shares of common stock following this offering. Please read "Description of Capital Stock--Registration Rights" for a further description of the terms of that agreement.

Executive Employment Agreements. We have entered into employment contracts with Arthur T. Sands, M.D., Ph.D., our President and Chief Executive Officer, Julia P. Gregory, our Executive Vice President and Chief Financial Officer, Jeffrey L. Wade, J.D., our Executive Vice President and General Counsel, James R. Piggott, Ph.D., our Senior Vice President of Pharmaceutical Biology, and Brian P. Zambrowicz, Ph.D., our Senior Vice President of Genomics. Please read "Management -- Employment Agreements" for a description of the terms of these agreements.

Indebtedness to Director. In August 1997, we entered into a loan agreement with William McMinn, the chairman of our board of directors. Under the terms of the promissory note, we borrowed a principal amount of $1,000,000 at an interest rate of 8.0% to be repaid in 36 monthly installments of $16,666.67 each. The monthly installments commenced on August 31, 1999, and the outstanding principal balance of the loan is due, together with all accrued but unpaid interest, on August 31, 2002. The note may be prepaid, in whole or in part, at any time without penalty. In connection with this loan agreement, we issued to Mr. McMinn a warrant to purchase 135,000 shares of our common stock at an exercise price of $2.50 per share.

We believe that all of the transactions described above were made on terms no less favorable to us than could have been obtained from unaffiliated third parties. All future transactions, including loans, between us and our officers, directors, principal stockholders and their affiliates will be approved by a majority of the board of directors, including a majority of the independent and disinterested directors, and will continue to be on terms no less favorable to us than could be obtained from unaffiliated third parties.

Indemnification Agreements. We have entered into indemnification agreements with our directors and officers for the indemnification of these persons to the full extent permitted by law. We also intend to execute these agreements with our future directors and officers.

PRINCIPAL STOCKHOLDERS

The following table presents information regarding the beneficial ownership of our common stock as of March 15, 2000, and as adjusted to reflect the sale of our common stock offered by this prospectus, by:

- each of the individuals listed in the "Summary Compensation Table" above;
- each of our directors;
- each person, or group of affiliated persons, who is known by us to own beneficially five percent or more of our common stock; and
- all current directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock under options held by that person that are currently exercisable or exercisable within 60 days of March 15, 2000 are considered outstanding. These shares, however, are not considered outstanding when computing the percentage ownership of each other person.

Except as indicated in the footnotes to this table and pursuant to state community property laws, each stockholder named in the table has sole voting and investment power for the shares shown as beneficially owned by them. Percentage of ownership is based on 37,515,051 shares of common stock outstanding on March 15, 2000 and 47,515,051 shares of common stock outstanding after completion of this offering. Unless otherwise indicated in the footnotes, the address of each of the individuals named below is: c/o Lexicon Genetics Incorporated, 4000 Research Forest Drive, The Woodlands, Texas 77381.

	BENEFICIAL OWNERSHIP PRIOR TO OFFERING			
	NUMBER OF SHARES BENEFICIALLY OWNED	SHARES ISSUABLE PURSUANT TO OPTIONS AND WARRANTS EXERCISABLE WITHIN 60 DAYS OF MARCH 15, 2000	PERCENTAGE BENEFICIALLY OWNED	
			BEFORE OFFERING	AFTER OFFERING
Baylor College of Medicine(1)	5,981,412	--	15.9%	12.0%
Apax Partners & Co.(2)	3,000,000	--	8.0%	6.3%
Patricof & Co. Ventures, Inc.(3)	3,000,000	--	8.0%	6.3%
Arthur T. Sands, M.D., Ph.D.(4)	1,017,300	1,466,004	6.4%	5.1%
Jeffrey L. Wade, J.D.	--	151,548	*	*
Lance K. Ishimoto, Ph.D., J.D.	--	59,301	*	*
Randall B. Riggs	--	128,694	*	*
Brian P. Zambrowicz, Ph.D.	--	447,354	1.2%	*
Sam L. Barker, Ph.D.(5)	--	999	*	*
C. Thomas Caskey, M.D.	--	3,125	*	*
William A. McMinn	1,402,011	135,000	4.1%	3.2%
Stephen J. Banks(6)	481,461	--	1.3%	1.0%
Gordon A. Cain	14,001,000	--	37.3%	29.5%
Patricia M. Cloherty(7)	3,000,000	--	8.0%	6.3%
Paul Haycock, M.D.(8)	3,000,000	--	8.0%	6.3%
All directors and executive officers as a group (16 persons)(4)(5)(6)(7)(8)	22,945,742	2,661,762	63.7%	51.0%

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* Represents beneficial ownership of less than 1 percent.

(1) The address for Baylor College of Medicine is c/o BCM Technologies, Inc., 1709 Dryden Road, Suite 901, Medical Towers Building, Houston, Texas 77030. The number of shares beneficially owned includes 481,461 shares owned by BCM Technologies, Inc., the technology transfer subsidiary of Baylor College of Medicine, and 1,162,431 shares held by Baylor College of Medicine as escrow agent. Mr. Banks, one of our directors, is President of BCM Technologies, Inc.

(2) Entities associated with Apax Partners & Co. are Apax UK VI-A-E, LPs. Dr. Haycock, one of our directors, is a director of Apax Partners & Co. The address of Apax Partners & Co. is 15 Portland Place, London, England WIN 3AA.

(3) Entities affiliated with Patricof & Co. Ventures, Inc. include APA Excelsior IV, L.P., APA Excelsior IV/Offshore, L.P., The P/A Fund III, LP and Patricof Private Investment Club, L.P. Ms. Cloherty, one of our directors, is a Special Limited Partner of Patricof & Co. Ventures, Inc. The address for Patricof & Co. Ventures, Inc. is 445 Park Avenue, New York, New York 10022.

(4) The number of shares beneficially owned by Dr. Sands includes 45,000 shares held in the name of minor children.

(5) Does not include 4,200 shares which Dr. Barker has indicated an interest to purchase under our directed share program. See "Underwriting." These shares have not been allocated and may not ultimately be purchased by Dr. Barker.

(6) The number of shares owned by Mr. Banks consists of 481,461 shares owned by BCM Technologies, Inc., of which Mr. Banks is President. Mr. Banks disclaims beneficial ownership of these shares.

(7) The number of shares owned by Patricia M. Cloherty consists of 3,000,000 shares owned by Patricof & Co. Ventures, Inc., of which Ms. Cloherty is a Special Limited Partner. Ms. Cloherty disclaims beneficial ownership of these shares.

(8) The number of shares owned by Paul Haycock, M.D. consists of 3,000,000 shares owned by Apax Partners & Co., of which Dr. Haycock is a director. Dr. Haycock disclaims beneficial ownership of these shares.

DESCRIPTION OF CAPITAL STOCK

Upon completion of this offering, our authorized capital stock will consist of 120,000,000 shares of common stock, $0.001 par value, and 5,000,000 shares of undesignated preferred stock, $0.01 par value.

COMMON STOCK

As of March 15, 2000, there were 37,515,051 shares of common stock outstanding held of record by 97 stockholders. The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. The holders of common stock are entitled to receive ratably any dividends as may be declared by the board of directors out of legally available funds, after the superior rights of the holders of preferred stock have been satisfied. Please read "Dividend Policy." Upon a liquidation, dissolution or winding up of our company, holders of the common stock are entitled to share ratably in all assets remaining after payment of liabilities and amounts due to the holders of preferred stock as described below. Holders of common stock have no preemptive rights and no right to convert their common stock into any other securities. There are no redemption or sinking fund provisions that apply to the common stock. All outstanding shares of common stock are, and all shares of common stock to be outstanding upon completion of this offering will be, fully paid and non-assessable.

PREFERRED STOCK

The board of directors has the authority to issue up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions granted to or imposed upon the preferred stock, including dividend rights, conversion rights, terms of redemption, liquidation preference, sinking fund terms and the number of shares constituting any series or the designation of a series, without any further vote or action by the stockholders. The board of directors, without stockholder approval, can issue preferred stock with voting and conversion rights that could adversely affect the voting power of the holders of common stock. The issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company. We have no present plan to issue any shares of preferred stock.

WARRANTS

As of March 15, 2000, we had three outstanding warrants entitling their holders to purchase an aggregate of 990,000 shares of common stock at an exercise price of $2.50 per share. The warrants contain provisions for the adjustment of the exercise price and the aggregate number of shares that may be issued upon the exercise of the warrant if a stock dividend, stock split, reorganization, reclassification or consolidation occurs.

REGISTRATION RIGHTS

On the date 180 days after the completion of this offering, the holders of 37,170,186 shares of common stock and warrants exercisable for 740,001 additional shares of common stock have rights which enable them to sell shares in transactions registered under the Securities Act of 1933. If we propose to register any of our securities under the Securities Act, either for our own account or for the account of other securityholders, the holders of these shares will be entitled to notice of the registration and will be entitled to include, at our expense, their shares of common stock. In addition, the holders of these shares may require us, at our expense and on not more than three occasions at any time beginning approximately six months from the date of the closing of this offering, to file a registration statement under the Securities Act covering their shares of common stock, and we will be required to use our best efforts to have the registration statement declared effective. These rights shall terminate on the earlier of five years after the effective date of this offering, or when a holder is able to sell all its shares pursuant to Rule 144 under the Securities Act in any 90-day period. These registration rights are subject to certain conditions and limitations, including the right of the underwriters to limit the number of shares included in the registration statement.

ANTI-TAKEOVER PROVISIONS OF DELAWARE LAW AND CHARTER PROVISIONS

Delaware Law

In general, Section 203 of the Delaware General Corporation Law prohibits a publicly held Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder unless:

- prior to the date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

- upon consummation of the transaction that resulted in the stockholder's becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding those shares owned by persons who are directors and also officers, and employee stock plans in which employee participants do not have the right to determine confidentially whether shares held under the plan will be tendered in a tender or exchange offer; or

- on or subsequent to the date, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 defines "business combination" to include:

- any merger or consolidation involving the corporation and the interested stockholder;

- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;

- in general, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; or

- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Charter Provisions

Our amended and restated certificate of incorporation and bylaws include a number of provisions that may have the effect of deterring hostile takeovers or delaying or preventing changes in control or management of our company. First, our certificate of incorporation provides that all stockholder actions following completion of this offering must be effected at a duly called meeting of holders and not by written consent. Second, our bylaws provide that special meetings of the holders may be called only by the chairman of the board of directors, the chief executive officer or our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors. Third, our certificate of incorporation provides that our board of directors can issue up to 5,000,000 shares of preferred stock, as described under "--Preferred Stock" above. Fourth, our certificate of incorporation and bylaws provide for a classified board of directors, in which approximately one-third of the directors would be elected each year. Consequently, any potential acquiror would need to successfully complete two proxy contests in order to take control of the board of directors. Finally, our bylaws establish procedures, including advance notice procedures, with regard to the nomination of candidates for election as directors and stockholder proposals. These provisions of our certificate of incorporation and bylaws could discourage potential acquisition proposals and could delay or prevent a change in our control or management.

TRANSFER AGENT AND REGISTRAR

ChaseMellon Shareholder Services has been appointed as the transfer agent and registrar for our common stock.

Our shares of common stock have been approved for quotation on the Nasdaq National Market under the symbol "LEXG".

MATERIAL U.S. FEDERAL TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a general discussion of certain material U.S. federal income and estate tax consequences of the ownership and disposition of our common stock by a beneficial owner thereof that is a "Non-U.S. Holder." A "Non-U.S. Holder" is a person or entity that, for U.S. federal income tax purposes, is a non-resident alien individual, a foreign corporation or a foreign estate or trust.

This discussion is based on the U.S. Internal Revenue Code of 1986, as amended, and administrative interpretations as of the date of this prospectus, all of which are subject to change, including changes with retroactive effect. This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to Non-U.S. Holders in light of their particular circumstances (including, without limitation, Non-U.S. Holders who are pass-through entities or who hold their common stock through pass-through entities) and does not address any tax consequences arising under the laws of any state, local or foreign jurisdiction. Prospective holders should consult their tax advisors with respect to the particular tax consequences under the laws of any state, local or foreign jurisdiction.

DIVIDENDS

Subject to the discussion below, dividends, if any, paid to a Non-U.S. Holder of our common stock generally will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. For purposes of determining whether tax is to be withheld at a 30% rate or at a reduced rate as specified by an income tax treaty, we ordinarily will presume that dividends paid on or before December 31, 2000 to an address in a foreign country are paid to a resident of such country absent knowledge that such presumption is not warranted.

Under U.S. Treasury Regulations applicable to dividends paid after December 31, 2000 (the "New Regulations"), to obtain a reduced rate of withholding under a treaty, a Non-U. S. Holder generally will be required to provide an Internal Revenue Service Form W-8 BEN certifying such Non-U.S. Holder's entitlement to benefits under a treaty. The New Regulations also provide special rules to determine whether, for purposes of determining the applicability of a tax treaty, dividends paid to a Non-U.S. Holder that is an entity should be treated as paid to the entity or those holding an interest in that entity.

There will be no withholding tax on dividends paid to a Non-U.S. Holder that are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States if a Form 4224, or, after December 31, 2000, a Form W-8 ECI, stating that the dividends are so connected is filed with us. Instead, the effectively connected dividends will be subject to regular U.S. income tax in the same manner as if the Non-U.S. Holder were a U.S. resident unless a specific treaty exemption applies. A non-U.S. corporation receiving effectively connected dividends may also be subject to an additional "branch profits tax" which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) of the non-U.S. corporation's effectively connected earnings and profits, subject to certain adjustments.

Generally, we must report to the U.S. Internal Revenue Service the amount of dividends paid, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder. Pursuant to tax treaties or certain other agreements, the U.S. Internal Revenue Service may make its reports available to tax authorities in the recipient's country of residence.

Dividends paid to a Non-U.S. Holder at an address within the United States may be subject to backup withholding imposed at a rate of 31% if the Non-U.S. Holder fails to establish that it is entitled to an exemption or to provide a correct taxpayer identification number and certain other information to us.

Under current U.S. federal income tax law, backup withholding generally does not apply to dividends paid on or before December 31, 2000 to a Non-U.S. Holder at an address outside the United States, unless the payer has knowledge that the payee is a U.S. person. Under the New Regulations however, a Non-U.S. Holder will be subject to backup withholding unless applicable certification requirements are met.

GAIN ON DISPOSITION OF COMMON STOCK

A Non-U.S. Holder generally will not be subject to U.S. federal income tax with respect to gain realized on a sale or other disposition of our common stock unless (i) the gain is effectively connected with a trade or business of such holder in the United States and a specific treaty exemption does not apply, (ii) in the case of certain Non-U.S. Holders who are nonresident alien individuals and hold our common stock as a capital asset, such individuals are present in the United States for 183 or more days in the taxable year of the disposition, (iii) the Non-U.S. Holder is subject to tax pursuant to the provision of the

U.S. Internal Revenue Code regarding the taxation of U.S. expatriates, or (iv) we are or have been a "U.S. real property holding corporation" within the meaning of Section 897(c)(2) of the U.S. Internal Revenue Code at any time within the shorter of the five-year period preceding such disposition or such holder's holding period. We believe that we are not, and do not anticipate becoming, a U.S. real property holding corporation. Even if we are treated as a U.S. real property holding corporation, gain realized by a Non-U.S. Holder on a disposition of our common stock will not be subject to U.S. federal income tax so long as (i) the Non-U.S. Holder is considered to have beneficially owned no more than five percent of the common stock at all times within the shorter of (a) the five year period preceding the disposition or (b) the holder's holding period and (ii) our common stock is regularly traded on an established securities market (within the meaning of section 897(c)(3) of the U.S. Internal Revenue Code and the temporary Treasury Regulations thereunder) at some time during the calendar year in which the disposition occurs. There can be no assurance that our common stock will continue to qualify as regularly traded on an established securities market.

INFORMATION REPORTING REQUIREMENTS AND BACKUP WITHHOLDING ON DISPOSITION OF COMMON STOCK

Under current U.S. federal income tax law, information reporting and backup withholding imposed at a rate of 31% will apply to the proceeds of a disposition of our common stock effected by or through a U.S. office of a broker unless the disposing holder certifies as to its non-U.S. status or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding will not apply to a payment of disposition proceeds where the transaction is effected outside the United States through a non-U.S. office of a non-U.S. broker. However, U.S. information reporting requirements (but not backup withholding) will apply to a payment of disposition proceeds where the transaction is effected outside the United States by or through an office outside the United States of a broker that fails to maintain documentary evidence that the holder is a Non-U.S. Holder and that certain conditions are met, or that the holder otherwise is entitled to an exemption, and the broker is (i) a U.S. person, (ii) a foreign person which derived 50% or more of its gross income for certain periods from the conduct of a trade or business in the United States, (iii) a "controlled foreign corporation" for U.S. federal income tax purposes, or (iv) effective after December 31, 2000, a foreign partnership (a) at least 50% of the capital or profits interest in which is owned by U.S. persons, or (b) that is engaged in a U.S. trade or business.

Effective after December 31, 2000, backup withholding will apply to a payment of those disposition proceeds if the broker has actual knowledge that the holder is a U.S. person.

Backup withholding is not an additional tax. Rather, the tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a refund may be obtained, provided that the required information is furnished to the U.S. Internal Revenue Service.

FEDERAL ESTATE TAX

An individual Non-U.S. Holder who is treated as the owner of, or has made certain lifetime transfers of, an interest in our common stock will be required to include the value thereof in his gross estate for U.S. federal estate tax purposes, and may be subject to U.S. federal estate tax unless an applicable estate tax treaty provides otherwise.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of our common stock in the public market could adversely affect prevailing market prices. Upon completion of this offering, we will have outstanding an aggregate of 47,515,051 shares of common stock. Of these shares, all of the shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, unless these shares are purchased by affiliates. The remaining 37,515,051 shares of common stock held by existing stockholders are restricted securities. Restricted securities may be sold in the public market only if registered or if they qualify for an exemption from registration under the Securities Act.

Our executive officers, directors and certain stockholders have agreed pursuant to "lock-up" agreements that, with limited exceptions, for a period of 180 days from the date of this prospectus, they will not sell any shares of common stock without the prior written consent of J.P. Morgan Securities Inc.

As a result of these "lock-up" agreements and the rules under the Securities Act, the restricted shares will be available for sale in the public market, subject, to certain volume and other restrictions, as follows:

DAYS AFTER THE EFFECTIVE DATE	NUMBER OF SHARES ELIGIBLE FOR SALE	COMMENT
On Effectiveness	--	Shares not locked-up and eligible for sale under Rule 144
90 days	--	Shares not locked-up and eligible for sale under Rules 144 and 701
180 days	34,972,551	Lock-up released; shares eligible for sale under Rules 144 and 701

Additionally, of the 8,473,134 shares that may be issued upon the exercise of options outstanding as of March 15, 2000, approximately 4,093,161 shares are subject to options which will be vested and exercisable 180 days after the date of this prospectus.

Registration Rights

On the date 180 days after the completion of this offering, the holders of 37,170,186 shares of our common stock and warrants exercisable for 740,001 additional shares of common stock will have rights to require us to register their shares under the Securities Act. Upon the effectiveness of a registration statement covering these shares, the shares would become freely tradable.

Stock Options

Immediately after this offering, we intend to file a registration statement under the Securities Act covering approximately 11,505,135 shares of common stock reserved for issuance under our stock option plans. We expect the registration statement to be filed and become effective as soon as practicable after the closing of this offering. Accordingly, shares registered under such registration statement will be available for sale in the open market after the effectiveness of the registration statement, unless they are held by persons that have signed a "lock-up" agreement.

UNDERWRITING

J.P. Morgan Securities Inc. and Credit Suisse First Boston Corporation are acting as joint lead managers for this offering. J.P. Morgan Securities Inc. is acting as book running lead manager for this offering.

We and the underwriters named below have entered into an underwriting agreement covering the common stock to be offered in this offering. J.P. Morgan Securities Inc., Credit Suisse First Boston Corporation, CIBC World Markets Corp. and Punk, Ziegel & Company, L.P. are acting as representatives of the underwriters. Each underwriter has agreed to purchase the number of shares of common stock set forth opposite its name in the following table.

UNDERWRITERS	NUMBER OF SHARES
J.P. Morgan Securities Inc.	
Credit Suisse First Boston Corporation	
CIBC World Markets Corp.	
Punk, Ziegel & Company, L.P.	
Total	10,000,000

The underwriting agreement provides that if the underwriters take any of the shares presented in the table above, then they must take all of these shares. No underwriter is obligated to take any shares allocated to a defaulting underwriter except under limited circumstances.

The underwriters are offering the shares of common stock, subject to the prior sale of shares, and when, as and if such shares are delivered to and accepted by them. The underwriters will initially offer to sell shares to the public at the initial public offering price shown on the cover page of this prospectus. The underwriters may sell shares to securities dealers at a discount of up to $ per share from the initial public offering price. Any such securities dealers may resell shares to certain other brokers or dealers at a discount of up to $ per share from the initial public offering price. After the initial public offering, the underwriters may vary the public offering price and other selling terms.

If the underwriters sell more shares than the total number shown in the table above, the underwriters have the option to buy up to an additional 1,500,000 shares of common stock from us to cover such sales. They may exercise this option during the 30-day period from the date of this prospectus. If any shares are purchased with this option, the underwriters will purchase shares in approximately the same proportion as shown in the table above.

The following table shows the per share and total underwriting discounts and commissions that we will pay to the underwriters. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	NO EXERCISE	FULL EXERCISE
Per share	$	$
Total	$	$

The underwriters may purchase and sell shares of common stock in the open market in connection with this offering. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in this offering. Stabilizing transactions consist of bids or purchases made for the purpose of preventing or slowing a decline in the market price of the common stock while this offering is in progress. The underwriters may also impose a penalty bid, which means that an underwriter must repay to the other underwriters a portion of the underwriting discount received by it. An underwriter may be subject to a penalty bid if the representatives of the underwriters, while engaging in stabilizing or short covering transactions, repurchase shares sold by or for the account of that underwriter. These activities may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them

at any time. The underwriters may carry out these transactions on the Nasdaq National Market, in the over-the-counter market or otherwise.

A prospectus in electronic format will be made available on an Internet site maintained by one or more of the underwriters participating in this offering.

We estimate that the total expenses of this offering, excluding underwriting discounts, will be $1,000,000.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

We and our executive officers, directors and certain stockholders have agreed that, with limited exceptions, during the period beginning from the date of this prospectus and continuing to and including the date 180 days after the date of this prospectus, none of us will, directly or indirectly, offer, sell, offer to sell, contract to sell or otherwise dispose of any shares of common stock or any of our securities which are substantially similar to the common stock, including but not limited to any securities that are convertible into or exchangeable for, or that represent the right to receive, common stock or any such substantially similar securities or enter into any swap, option, future, forward or other agreement that transfers, in whole or in part, the economic consequence of ownership of common stock or any securities substantially similar to the common stock, other than pursuant to employee stock option plans existing on the date of this prospectus, without the prior written consent of J.P. Morgan Securities Inc.

At our request, the underwriters have reserved shares of common stock for sale to our directors, officers, employees, consultants and family members of the foregoing. We expect these persons to purchase no more than five percent, or 500,000 shares, of the common stock offered in this offering. The number of shares available for sale to the general public will be reduced to the extent such persons purchase such reserved shares.

Our shares of common stock have been approved for quotation on the Nasdaq National Market under the symbol "LEXG".

It is expected that delivery of the shares will be made to investors on or about , 2000.

There has been no public market for the common stock prior to this offering. We and the underwriters will negotiate the initial offering price. In determining the price, we and the underwriters expect to consider a number of factors in addition to prevailing market conditions, including:

- the history of and prospects for our industry and for biotechnology companies generally;
- an assessment of our management;
- our present operations;
- our historical results of operations;
- the trend of our revenues and earnings; and
- our earnings prospects.

We and the underwriters will consider these and other relevant factors in relation to the price of similar securities of generally comparable companies. Neither we nor the underwriters can assure investors that an active trading market will develop for the common stock, or that the common stock will trade in the public market at or above the initial offering price.

From time to time in the ordinary course of their respective businesses, certain of the underwriters and their affiliates have engaged in and may in the future engage in commercial banking and/or investment banking transactions with us and our affiliates. In addition, Punk, Ziegel & Company, L.P. and its affiliates beneficially own common stock, convertible preferred stock that will convert into common stock upon completion of this offering and warrants to purchase common stock at $2.50 per share, which represents 1.3% of our outstanding common stock assuming completion of this offering and exercise of the warrants. Of these securities, two affiliates of Punk, Ziegel & Company L.P. own an aggregate of 28,311 shares of common stock that are presumed to be underwriting compensation in connection with this offering pursuant to the conduct rules of the National Association of Securities Dealers, Inc. Accordingly, these affiliates have executed lock-up agreements with us prohibiting them from selling, transferring, assigning, pledging or hypothecating these shares for a period of one year following the effective date of this offering, except to officers or partners of the underwriters and members of the selling group and their officers or partners. To comply with other provisions of the conduct rules of the National Association of Securities Dealers, Inc., Punk, Ziegel & Company L.P. and its affiliates have agreed not to sell, transfer, assign, pledge or hypothecate all other securities of ours owned by them for a period of 90 days following the effective date of this offering, except in certain limited circumstances.

LEGAL MATTERS

The validity of the common stock offered by this prospectus will be passed upon for us by Andrews & Kurth L.L.P., Houston, Texas. Legal matters in connection with the offering will be passed upon for the underwriters by Cahill Gordon & Reindel, New York, New York.

EXPERTS

The financial statements, as of December 31, 1998 and 1999, and for each of the three years in the period ended December 31, 1999, included in this prospectus have been audited by Arthur Andersen LLP, independent public accountants, as indicated in their report with respect thereto, and are included herein in reliance upon the authority of said firm as experts in giving said report.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act of 1933 regarding the shares of common stock offered by us. This prospectus, which constitutes a part of the registration statement, does not contain all of the information contained in the registration statement, some items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information on us and the common stock we are offering, reference is made to the registration statement, including the exhibits, and the financial statements and notes filed as a part of the registration statement. A copy of the registration statement, including the exhibits and the financial statements and notes filed as a part of it, may be inspected without charge at the public reference facilities maintained by the SEC in Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549, and copies of all or any part of the registration statement may be obtained from the SEC upon the payment of fees prescribed by it. The SEC maintains a Web site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding companies that file electronically with it.

As a result of this offering, we will become subject to the information and reporting requirements of the Securities Exchange Act of 1934 and will file periodic reports, proxy statements and other information with the SEC. You may inspect any of these documents as described in the preceding paragraph. These reports, proxy statements and other information may also be inspected at the offices of Nasdaq Operations, 1735 K Street, N.W., Washington, D.C. 20006.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To the Board of Directors and Stockholders of
Lexicon Genetics Incorporated:

We have audited the accompanying balance sheets of Lexicon Genetics Incorporated (a Delaware corporation) as of December 31, 1998 and 1999, and the related statements of operations, stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 1999. These financial statements are the responsibility of Lexicon's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Lexicon Genetics Incorporated as of December 31, 1998 and 1999, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 1999, in conformity with generally accepted accounting principles.

ARTHUR ANDERSEN LLP

Houston, Texas
February 4, 2000 (except with
respect to the matter discussed
in the first paragraph of Note 6,
as to which the date is March 16, 2000)

LEXICON GENETICS INCORPORATED

BALANCE SHEETS

	AS OF DECEMBER 31,		PRO FORMA STOCKHOLDERS' EQUITY (DEFICIT) AT DECEMBER 31,
	1998	1999	1999
			(UNAUDITED)
ASSETS			
Current assets			
Cash and cash equivalents	$ 3,022,201	$ 2,025,585	
Marketable securities	16,400,158	7,130,848	
Accounts receivable	1,673,479	3,391,648	
Prepaid expenses and other current assets	17,471	76,257	
Total current assets	21,113,309	12,624,338	
Property, plant and equipment	8,326,683	12,476,021	
Accumulated depreciation	(1,185,951)	(3,087,397)	
	7,140,732	9,388,624	
Other assets, net	261,962	281,605	
Total assets	$28,516,003	$22,294,567	
LIABILITIES, REDEEMABLE CONVERTIBLE PREFERRED STOCK, AND STOCKHOLDERS' EQUITY (DEFICIT)			
Current liabilities			
Accounts payable and accrued liabilities	$ 1,593,446	$ 1,192,276	
Current portion of related party note payable	83,335	200,004	
Current portion of long-term debt	--	874,174	
Current portion of capital lease obligations	196,085	127,119	
Current portion of deferred revenue	1,138,750	8,209,574	
Total current liabilities	3,011,616	10,603,147	
Related party note payable, net of current portion	916,665	716,663	
Long-term debt, net of current portion	--	2,854,365	
Capital lease obligations, net of current portion	107,114	6,279	
Deferred revenue, net of current portion	4,000,000	--	
Total liabilities	8,035,395	14,180,454	
Commitments and contingencies			
Redeemable convertible Series A preferred stock, $.01 par value, 10,000,000 shares authorized 4,244,664, 4,244,664 and no shares issued and outstanding, respectively; aggregate liquidation preference of $31,834,980 at December 31, 1999 (none pro forma)	29,514,820	30,050,236	$ --
Stockholders' equity (deficit)			
Common stock, $.001 par value, 120,000,000 shares authorized, 24,490,695, 24,540,201 and 37,274,193 shares issued and outstanding, respectively	24,491	24,540	37,274
Additional paid-in capital	7,374,843	7,863,392	37,900,894
Deferred stock compensation	--	(915,422)	(915,422)
Accumulated deficit	(16,433,546)	(28,908,633)	(28,908,633)
Total stockholders' equity (deficit)	(9,034,212)	(21,936,123)	$ 8,114,113
Total liabilities and stockholders' equity (deficit)	$28,516,003	$22,294,567	

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

LEXICON GENETICS INCORPORATED

STATEMENTS OF OPERATIONS

	YEAR ENDED DECEMBER 31,		
	1997	1998	1999
Revenues			
Subscription and license fees	$ 336,875	$ 761,950	$ 2,197,696
Collaborative research	486,416	1,072,205	2,120,016
Reagents	144,451	204,445	229,967
Grants	--	203,242	190,024
Total revenues	967,742	2,241,842	4,737,703
Operating expenses			
Research and development	4,970,488	8,409,770	14,645,773
General and administrative	1,472,966	2,024,322	2,913,121
Total operating expenses	6,443,454	10,434,092	17,558,894
Loss from operations	(5,475,712)	(8,192,250)	(12,821,191)
Interest income	133,004	838,110	648,906
Interest expense	58,861	126,665	302,802
Net loss	(5,401,569)	(7,480,805)	(12,475,087)
Accretion on redeemable convertible preferred stock	----------	(356,946)	(535,416)
Net loss attributable to common stockholders	$(5,401,569)	$(7,837,751)	$(13,010,503)
Net loss per common share, basic and diluted	$ (0.23)	$ (0.32)	$ (0.53)
Shares used in computing net loss per common share, basic and diluted	23,988,969	24,445,422	24,530,427
Pro forma net loss per common share, basic and diluted			$ (0.33)
Shares used in computing pro forma net loss per common share, basic and diluted			37,264,419

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

LEXICON GENETICS INCORPORATED

STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

	STOCKHOLDERS' EQUITY (DEFICIT)					
	COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	DEFERRED STOCK COMPENSATION	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' EQUITY (DEFICIT)
	SHARES	PAR VALUE				
Balance at December 31, 1996	22,652,694	$22,653	$4,049,238	$ --	$ (3,551,172)	$ 520,719
Issuance of common stock for cash ($1.75 per share)	1,770,000	1,770	2,948,230	--	--	2,950,000
Net loss	--	--	--	--	(5,401,569)	(5,401,569)
Balance at December 31, 1997	24,422,694	24,423	6,997,468	--	(8,952,741)	(1,930,850)
Common stock warrants issued with debt agreement	--	--	24,750	--	--	24,750
Warrants issued in conjunction with redeemable convertible Series A preferred stock	--	--	498,597	--	--	498,597
Common stock warrants issued for lease option	--	--	195,855	--	--	195,855
Exercise of common stock options	68,001	68	15,119	--	--	15,187
Accretion on redeemable convertible preferred stock to redemption value	--	--	(356,946)	--	--	(356,946)
Net loss	--	--	--	--	(7,480,805)	(7,480,805)
Balance at December 31, 1998	24,490,695	24,491	7,374,843	--	(16,433,546)	(9,034,212)
Exercise of common stock options	49,506	49	22,910	--	--	22,959
Accretion on redeemable convertible preferred stock to redemption value	--	--	(535,416)	--	--	(535,416)
Deferred stock compensation	--	--	1,001,055	(1,001,055)	--	--
Amortization of deferred stock compensation	--	--	--	85,633	--	85,633
Net loss	--	--	--	--	(12,475,087)	(12,475,087)
Balance at December 31, 1999	24,540,201	$24,540	$7,863,392	$ (915,422)	$(28,908,633)	$(21,936,123)

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

LEXICON GENETICS INCORPORATED

STATEMENTS OF CASH FLOWS

	YEAR ENDED DECEMBER 31,		
	1997	1998	1999
CASH FLOWS FROM OPERATING ACTIVITIES			
Net loss	$(5,401,569)	$ (7,480,805)	$(12,475,087)
Adjustments to reconcile net loss to net cash used in operating activities			
Depreciation	315,929	756,600	1,901,446
Loss on sale of asset	--	21,819	--
Amortization of deferred stock compensation	--	--	85,633
Amortization of lease option	--	17,180	41,232
Amortization of deferred financing costs	--	24,750	--
Changes in operating assets and liabilities			
Increase in accounts receivable	(444,618)	(1,070,309)	(1,718,169)
(Increase) decrease in prepaid expenses and other current assets	22,321	(12,875)	(58,786)
Increase in other assets	(43,135)	(3,736)	(60,875)
Increase (decrease) in accounts payable and accrued liabilities	354,581	800,410	(401,170)
Increase in deferred revenue	4,500,000	638,750	3,070,824
Net cash used in operating activities	(696,491)	(6,308,216)	(9,614,952)
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchases of property and equipment	(1,289,438)	(5,658,953)	(4,100,286)
Sale of marketable securities	--	24,026,708	21,818,363
Purchase of marketable securities	--	(40,426,865)	(12,549,053)
Proceeds from sale of asset	--	47,000	--
Net cash provided by (used in) investing activities	(1,289,438)	(22,012,110)	5,169,024
CASH FLOWS FROM FINANCING ACTIVITIES			
Principal payments of capital lease obligations	(83,633)	(209,569)	(218,853)
Proceeds from issuance of common stock	2,950,000	15,187	22,959
Proceeds from issuance of redeemable convertible Series A preferred stock	--	29,656,471	--
Proceeds from debt borrowings	1,100,000	--	4,168,060
Repayment of debt borrowings	--	(100,000)	(522,854)
Net cash provided by financing activities	3,966,367	29,362,089	3,449,312
Net increase (decrease) in cash and cash equivalents	1,980,438	1,041,763	(996,616)
Cash and cash equivalents at beginning of year	--	1,980,438	3,022,201
Cash and cash equivalents at end of year	$ 1,980,438	$ 3,022,201	$ 2,025,585
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Cash paid for interest	$ 29,528	$ 49,331	$ 409,469
SUPPLEMENTAL DISCLOSURE OF NONCASH INVESTING AND FINANCING ACTIVITIES			
Purchases of equipment under capital lease obligations	$ 407,047	$ 58,297	$ 49,052
Warrants issued in conjunction with lease option	$ --	$ 195,855	$ --
Warrants issued in conjunction with debt borrowings	$ 24,750	$ --	$ --

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

LEXICON GENETICS INCORPORATED

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 1999

1. ORGANIZATION AND OPERATIONS

Lexicon Genetics Incorporated is a Delaware corporation incorporated on July 7, 1995. Lexicon was organized to research, develop and market products and services related to functional genomics and drug target identification.

Lexicon has financed its operations from inception primarily through private financing transactions, contract and milestone payments related to subscription and collaboration agreements, and certain equipment financing arrangements. Lexicon's future success is dependent upon many factors, including, but not limited to, its ability to use gene sequence databases and knockout mice to select promising candidates for drug target or therapeutic protein development, reliance on subscriptions to its databases, compliance with state and federal regulatory restrictions, favorable public perception regarding ethical and social issues, reliance on collaborative research and development arrangements with corporate and academic affiliates and the obtaining of the funds necessary to complete these activities. As a result of the aforementioned factors and the related uncertainties, there can be no assurance of Lexicon's future success.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from those estimates.

Cash, Cash Equivalents and Marketable Securities: Lexicon considers all highly liquid investments with original maturities of three months or less to be cash equivalents. Management determines the appropriate classification of its cash equivalents and marketable securities at the time of purchase. Marketable securities consist of U.S. Government agency debt obligations and investment grade commercial paper that mature one to six months after December 31, 1999. Management has classified Lexicon's marketable securities as held-to-maturity securities in the accompanying financial statements. Held-to-maturity securities are carried at purchase cost plus accrued interest, which approximates fair value.

Concentration of Credit Risk: Lexicon's cash equivalents and marketable securities represent potential concentrations of credit risk. Lexicon minimizes potential concentrations of risk in cash equivalents by placing investments in high-quality financial instruments. At December 31, 1999, management believes that Lexicon has no significant concentrations of credit risk and has incurred no impairments in the carrying values of its cash equivalents and marketable securities.

Significant Customers: For the years ended December 31, 1997, 1998 and 1999, six, three and three entities represented 55%, 48% and 58% of Lexicon's revenues, respectively.

Property and Equipment: Property and equipment are carried at cost and depreciated using the straight-line method over the estimated useful life of the assets which ranges from three to seven years.

Revenue Recognition: Revenues are earned from services performed pursuant to database subscription and access agreements, and collaborations for the development and, in some cases, analysis of knockout mice. Subscription and access fees received are recognized ratably over the subscription or access period. Payments received in advance under these arrangements are recorded as deferred revenue until earned. Collaborative research payments are non-refundable, regardless of the success of the research effort, and are recognized as revenue as Lexicon performs its obligations related to such research. Milestone based fees are recognized upon completion of specified milestones according to contract terms. Revenues for the supply of reagents to collaboration partners and customers are recognized upon shipment. Non-refundable sublicense fees are recognized as revenues upon the transfer of the sublicense to third parties, when performance is complete and there is no continuing involvement. Grant revenue is recognized as the related costs are incurred.

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. Research and development expenses also include certain costs associated with the production of custom knockout mice associated with specific collaborative research agreements. Through December 31, 1999, total production costs incurred have not been significant. Patent costs and technology license fees, which are utilized in research and development and have no alternative future use, are expensed when incurred.

Net Loss Per Share: Net loss per share is computed using the weighted average number of shares of common stock outstanding. Shares associated with stock options and warrants and the convertible preferred stock are not included because they are antidilutive.

Pro Forma Net Loss Per Share (Unaudited): Pro forma net loss per share is computed using the weighted average number of common shares outstanding, including pro forma effects of the automatic conversion of outstanding redeemable convertible preferred stock into shares of Lexicon's common stock effective upon the closing of Lexicon's initial public offering as if such conversion occurred on the date of original issuance.

The following table sets forth the computation of basic and diluted, and pro forma basic and diluted, net loss per share for the respective periods.

	YEAR ENDED DECEMBER 31,		
	1997	1998	1999
Basic and diluted			
Net loss	$ (5,401,569)	$ (7,480,805)	$(12,475,087)
Accretion on redeemable convertible preferred stock	--	(356,946)	(535,416)
Net loss attributable to common stockholders	$ (5,401,569)	$ (7,837,751)	$(13,010,503)
Shares used to compute net loss per common share	23,988,969	24,445,422	24,530,427
Net loss per common share	$ (0.23)	$ (0.32)	$ (0.53)
Pro forma basic and diluted			
Net loss			$(12,475,087)
Shares used to compute net loss per share			24,530,427
Adjustment to reflect weighted-average effect of assumed conversion of redeemable convertible preferred stock			12,733,992
Weighted-average shares used in pro forma basic and diluted net loss per share			37,264,419
Pro forma net loss per share			$ (0.33)

Recent Accounting Pronouncements: In December 1999, the SEC issued Staff Accounting Bulletin 101, "Revenue Recognition in Financial Statements" (SAB 101), which provides guidance related to revenue recognition based on interpretations and practices followed by the SEC. SAB 101 is effective the first fiscal quarter of fiscal years beginning after December 15, 1999 and requires companies to report any changes in revenue recognition as a cumulative change in accounting principle at the time of implementation. Lexicon's management believes that its revenue recognition policy is in accordance with SAB 101 and does not believe that adoption of this SAB will have a material impact on Lexicon's financial position or results of operations.

3. PROPERTY AND EQUIPMENT

Property and equipment at December 31, 1998 and 1999, are as follows:

	USEFUL LIVES IN YEARS	AS OF DECEMBER 31, 1998	AS OF DECEMBER 31, 1999
Computers and software	3	$1,188,007	$2,275,528
Furniture and fixtures	5-7	300,224	386,760
Laboratory equipment	7	3,275,454	4,678,492
Leasehold improvements	7	3,562,998	5,135,241
		8,326,683	12,476,021
Less: Accumulated depreciation		(1,185,951)	(3,087,397)
Net property and equipment		$7,140,732	$9,388,624

As of December 31, 1999, approximately $133,398 of the above equipment is held under capital leases.

4. FINANCING AND DEBT OBLIGATIONS

In June 1999, Lexicon entered into a $5.0 million financing arrangement for the purchase of property and equipment. As of December 31, 1999, Lexicon had drawn down approximately $4.2 million and had $831,940 remaining available under this arrangement. As of December 31, 1999, $3.7 million of the amount outstanding was secured by the equipment financed. This facility accrues interest at a weighted average rate of 11.7% and is due in monthly installments of $106,054 through the year 2003. In addition, as of December 31, 1999, the balance of this obligation was $3,728,539.

In August 1997, Lexicon entered into two notes payable in the amount of $1 million and $100,000, respectively. During 1998, Lexicon paid off the entire balance of the $100,000 note. The remaining unsecured $1 million note is payable to a member of the board of directors and bears interest at the rate of 8 percent. The note is paid in monthly installments of $16,667 plus any accrued and unpaid interest with the balance due August 2002. As of December 31, 1999, the balance of this obligation was $916,667.

5. INCOME TAXES

Lexicon recognizes deferred tax liabilities and assets for the expected future tax consequences of events that have been recognized differently in the financial statements and tax returns. Under this method, deferred tax liabilities and assets are determined based on the difference between the financial statement carrying amounts and tax bases of liabilities and assets using enacted tax rates and laws in effect in the years in which the differences are expected to reverse. Deferred tax assets are evaluated for realization based on a more-likely-than-not criteria in determining if a valuation should be provided.

The components of Lexicon's deferred tax assets (liabilities) at December 31, 1998 and 1999, are as follows:

	AS OF DECEMBER 31,	
	1998	1999
Net operating loss carryforwards	$5,436,001	$ 9,466,857
Technology license	125,001	114,293
Research and development tax credits	359,034	670,663
Accrued expenses not yet deductible	(12,680)	(21,853)
Start-up and organizational costs	71,188	38,332
Property and equipment	(281,160)	(234,490)
Prepaid expenses	1,309	(20,459)
Total deferred tax assets (liabilities)	5,698,693	10,013,343
Less: Valuation allowance	(5,698,693)	(10,013,343)
Net deferred tax assets	$ --	$ --

As of December 31, 1999, Lexicon has generated net operating loss (NOL) carryforwards of approximately $27.0 million and research and development tax credits of approximately $671,000 available to reduce future income taxes. These carryforwards begin to expire in 2011. A change in ownership, as defined by federal income tax regulations, could significantly limit Lexicon's ability to utilize its carryforwards. Lexicon's ability to utilize its current and future NOLs to reduce future taxable income and tax liabilities may be limited. Additionally, because federal tax laws limit the time during which these carryforwards may be applied against future taxes, Lexicon may not be able to take full advantage of these attributes for federal income tax purposes. As Lexicon has had cumulative losses and there is no assurance of future taxable income, valuation allowances have been established to fully offset the deferred tax assets of $5,698,693 and $10,013,343 at December 31, 1998 and 1999, respectively. The valuation allowance increased approximately $4,314,650 million during 1999, primarily due to Lexicon's net loss.

6. REDEEMABLE CONVERTIBLE PREFERRED STOCK AND CAPITAL STOCK

Stock Dividend: In March 2000, Lexicon's Board of Directors declared a stock dividend to effect a stock split of 3 shares for every 1 share of common stock then outstanding. The stock split will become effective immediately prior to the effectiveness of the Registration Statement relating to the public offering of common stock. Accordingly, the accompanying financial statements and footnotes have been restated to reflect the stock split, including an assumed increase in authorized shares of common stock. The par value of the shares of common stock to be issued in connection with the stock dividend was credited to common stock and a like amount charged to additional paid-in capital.

Redeemable Convertible Series A Preferred Stock: During May 1998, a private placement was completed in which Lexicon issued 4,244,664 shares of redeemable convertible Series A preferred stock (Series A Preferred Stock) for proceeds of approximately $29.6 million net of placement agent fees and offering costs of approximately $2.2 million. The Series A Preferred Stock has the right to receive dividends in the form of cash, common stock or any combination of cash and common stock at Lexicon's discretion. Any dividends declared to junior securities must be matched or exceeded with dividends to the Series A Preferred Stock. As of December 31, 1999, no dividends had been declared. The Series A Preferred Stock has voting rights equal to one vote for each full share of common stock into which the Series A Preferred Stock held by such holder could then be converted.

The Series A Preferred Stock is convertible into common stock at the discretion of the stockholder after the stock's issuance and prior to the mandatory redemption date outlined below at a price of $2.50 per share of common stock. In addition, the Series A Preferred Stock will be automatically converted into common stock if (a) Lexicon receives the written consent of the holders of at least 66 2/3 percent of the Series A Preferred Stock then outstanding or (b) Lexicon consummates an underwritten public offering of its common stock with gross proceeds, net of underwriting discounts and commissions, exceeding $20 million and at a price of at least $6.25 per share. At December 31, 1999, a total of 12,733,992 shares of common stock were issuable upon conversion of the Series A Preferred Stock.

The Series A Preferred Stock will be automatically redeemable on May 7, 2003, for a sum of the following: (a) the greater of $2.50 per share or the fair market value of the number of shares of common stock into which a share of Series A Preferred Stock could then be converted and (b) an amount per share equal to all declared but unpaid dividends. The Series A Preferred Stock is being accreted to its redemption value of $31,834,980 on May 7, 2003. The Series A Preferred Stock balance has not been included as a component of total stockholders' equity (deficit) in the accompanying financial statements due to its redemption features.

Pro Forma Stockholders' Equity Information: Upon the effective date of Lexicon's proposed initial public offering all of the preferred stock outstanding will automatically be converted into 12,733,992 shares of common stock. The unaudited pro forma redeemable convertible preferred stock and stockholders' equity at December 31, 1999 has been adjusted for the assumed conversion of preferred stock based on the shares of preferred stock outstanding at December 31, 1999.

Common Stock: In 1996, Lexicon entered into a subscription agreement with an individual investor through which Lexicon agreed to issue 2,400,000 shares of common stock at a price of $1.67 per share. Total cash consideration of $4,000,000 was received and the related shares issued at various dates from September 1996 through July 1997.

On September 14, 1995, Lexicon entered into a stockholders' agreement with its stockholders providing for certain restrictions on the transfer of shares of Lexicon's capital stock and certain preemptive rights with respect to new securities offered by Lexicon. The agreement was subsequently extended to other stockholders and holders of warrants and was amended and restated as of May 7, 1998. As amended and restated, the stockholders' agreement (a) requires any stockholder who desires to sell shares of Company stock to first offer to sell such shares to Lexicon and to the remaining stockholders, (b) permits holders of Series A Preferred Stock, at their option, to participate on a pro rata basis in certain sales of Company stock by selling stockholders, (c) grants certain preemptive rights to a director and founding stockholder of Lexicon and to the holders of Series A Preferred Stock with respect to new securities offered by Lexicon and (d) contains voting agreements with respect to the election of directors and certain other matters, in each case subject to certain exceptions. The agreement terminates upon the earlier to occur of (a) the closing of a qualifying initial public offering of Lexicon's common stock or (b) the written approval of Lexicon and the holders of at least 75 percent of the outstanding capital stock of Lexicon subject to the agreement.

On September 14, 1995, Lexicon entered into a registration rights agreement with its founding stockholders. The agreement was subsequently extended to other stockholders and holders of warrants and was amended and restated as of May 7, 1998. As amended and restated, the registration rights agreement provides holders of registrable securities with the right to require Lexicon to register the offering of their shares under the Securities Act of 1933, as amended, under certain circumstances and subject to certain exceptions. Such rights may be exercised by holders of registrable securities who, in the aggregate, hold (a) at least 25 percent of the then-outstanding registrable securities that were originally issued to a director and founding stockholder of Lexicon or (b) 25 percent of the then-outstanding registrable securities issued or issuable upon conversion of the Series A Preferred Stock. The registration rights agreement also provides holders of registrable securities with the right to include their shares in offerings registered under the Securities Act of 1933, as amended, for the account of Lexicon or for the account of other holders of registration rights, subject to certain exceptions. The registration rights agreement provides that Lexicon shall pay the expenses associated with all such registrations.

7. STOCK OPTIONS AND WARRANTS

Stock Options: In September 1995, Lexicon's board of directors approved the 1995 Stock Option Plan (the Plan). Under the Plan, as amended, a total of 6,000,000 shares of common stock have been reserved for issuance upon exercise of stock options granted to employees, consultants or directors. The option price may not be less than the fair market value per share on the date of grant for incentive stock options. All of the options issued by Lexicon through December 31, 1999, vest in accordance with grant provisions (typically four years) and are exercisable for a period of 10 years subsequent to the date of grant.

Lexicon follows Statement of Financial Accounting Standards (SFAS) No. 123, "Accounting for Stock-Based Compensation," which permits one of two methods for accounting for stock options. Lexicon has elected the method that only requires note disclosure of stock-based compensation. Because of this election, Lexicon is required to account for its employee stock-based compensation plan under Accounting Principles Board (APB) Opinion No. 25 and its related interpretations. In accordance with APB No. 25, deferred compensation is recorded for stock-based compensation grants based on the excess of the estimated fair value of the common stock on the measurement date over the exercise price. The deferred compensation is amortized over the vesting period of each unit of stock-based compensation grant, which is generally four years. If the exercise price of the stock-based compensation grants is equal to the estimated fair value of Lexicon's stock on the date of grant, no compensation expense is recorded.

Lexicon records the fair value of options issued to non-employee consultants, including Scientific Advisory Board members, at the fair value of the options issued. Lexicon has not incurred significant compensation expense relating to non-employee consultant grants. Options to purchase 45,000 shares of common stock were issued to non-employees in 1999, and none were issued in 1997 or 1998. The fair values of the issuances in 1999 were estimated using the Black-Scholes pricing model with the assumptions noted in the following paragraph, resulting in an aggregate fair value of $57,000. Any expense is recognized over the service period or at the date of issuance if the options are fully vested and no performance obligation exists.

The following pro forma information regarding net loss is required by SFAS No. 123, and has been determined as if Lexicon had accounted for its employee stock options under the fair-value method as defined by SFAS No. 123. The fair value of these options was estimated at the date of grant using the Black-Scholes method and the following assumptions for 1997, 1998, and 1999: volatility of 29%, risk-free interest rate of 8%, expected option lives of seven years, three percent expected turnover, and no dividends.

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the vesting period of the options using the straight-line method. Lexicon's pro forma information follows:

	YEAR ENDED DECEMBER 31,		
	1997	1998	1999
Net loss			
As reported	$(5,401,569)	$(7,480,805)	$(12,475,087)
Pro forma	$(5,888,118)	$(8,484,922)	$(14,117,799)
Net loss per common share, basic and diluted			
As reported	$ (0.23)	$ (0.32)	$ (0.53)
Pro forma	$ (0.25)	$ (0.36)	$ (0.60)

The following is a summary of option activity under this plan:

	OPTIONS OUTSTANDING	WEIGHTED AVERAGE EXERCISE PRICE
Balance at December 31, 1996	1,938,300	$0.32
Granted	916,350	1.67
Exercised	--	--
Canceled	(53,100)	1.59
Balance at December 31, 1997	2,801,550	$0.74
Granted	2,128,650	2.48
Exercised	(68,001)	0.22
Canceled	(123,225)	1.32
Balance at December 31, 1998	4,738,974	$1.51
Granted	1,064,700	2.50
Exercised	(49,506)	0.46
Canceled	(557,613)	2.03
Balance at December 31, 1999	5,196,555	$1.67
Exercisable at December 31, 1999	2,807,424	$1.06

The weighted average fair values of options granted during the years ended December 31, 1997, 1998, and 1999 were $0.84, $1.25 and $1.26, respectively. As of December 31, 1999, 685,938 shares of common stock were available for grant under the Plan.

The following table summarizes information about stock options outstanding at December 31, 1999:

OPTIONS OUTSTANDING				OPTIONS EXERCISABLE	
RANGE OF EXERCISE PRICES	OUTSTANDING AS OF DECEMBER 31, 1999	WEIGHTED AVERAGE REMAINING CONTRACTUAL LIFE (IN YEARS)	WEIGHTED AVERAGE EXERCISE PRICE	EXERCISABLE AS OF DECEMBER 31, 1999	WEIGHTED AVERAGE EXERCISE PRICE
$0.0003 -$0.22	1,501,500	5.8	$0.11	1,408,121	$0.11
0.22 -1.67	854,523	6.7	1.67	581,069	1.67
1.67 -2.50	2,840,532	8.8	2.50	687,221	2.50
$0.0003 -$2.50	5,196,555	7.6	$1.67	2,676,411	$1.06

Lexicon recorded approximately $1.0 million in deferred compensation expense, relating to options issued during the year ended December 31, 1999, for the excess of the estimated fair value of the common stock on the date of grant over the exercise price. The fair value of the common stock on the date of grant was determined based on valuations in relation to Lexicon's preferred stock financing and the development of Lexicon's gene trapping technology. The deferred compensation will be amortized over the four-year vesting period of the options. During the year ended December 31, 1999, Lexicon recognized $85,633 in compensation expense relating to these options.

Warrants: In August 1997, Lexicon issued warrants to acquire 13,500 shares and 135,000 shares of common stock in connection with certain loan agreements (see Note 4). The warrants are exercisable for a period of three years at a price of $2.50 per share. Management estimated the value of these warrants at $24,750 and recorded them as deferred financing costs and additional paid-in capital. The warrant values were estimated by management taking into consideration the term of the warrant, the exercise price that was greater than the estimated fair value of the common stock at issuance and a rate of return of 8.0 percent. Amortization of these costs is reflected as additional interest expense in the accompanying financial statements.

On May 7, 1998, simultaneous with the completion of the Series A Preferred Stock private placement, Lexicon issued a warrant to acquire 605,001 shares of common stock in conjunction with the sale of the Series A Preferred Stock (the 1998 Warrant). The 1998 Warrant is exercisable at the following prices: (a) an exercise price of $2.50 per share or (b) a "cashless"

purchase of the common stock calculated based upon the difference between fair market value and exercise price. The warrant expires on the fifth anniversary of the date of grant. Management estimated the value of this warrant at approximately $498,000. The warrant values were estimated by management taking in to consideration the term of the warrant, the exercise price that equaled the estimated fair value of the common stock at issuance and a rate of return of 8 percent. Upon consummation of the private placement, this amount was recorded as a reduction of the Series A Preferred Stock balance and an increase to additional paid-in capital. The value of the warrant, along with the offering costs associated with the private placement, are being accreted back to the Series A Preferred Stock over a five-year period.

In July 1998, Lexicon issued a warrant to acquire 249,999 shares of common stock for the option to lease additional facility space. The warrant is exercisable for a period of three years at a price of $2.50 per share. Management estimated the value of this warrant at approximately $196,000. The warrant values were estimated by management taking in to consideration the term of the warrant, the exercise price that equaled the estimated fair value of the common stock at issuance and a rate of return of 8 percent. As this warrant has been treated as consideration for the option to lease certain facility space (lease option), Lexicon has recorded the warrant's value as a long-term asset and additional paid-in capital. Amortization of the lease option, $17,180 and $41,232 during 1998 and 1999, respectively, has been recorded as additional lease expense in the accompanying financial statements.

8. COLLABORATION AND LICENSE AGREEMENTS

In October 1999, Lexicon entered into an initial agreement with Millennium Pharmaceuticals, Inc. ("Millennium") for non-exclusive access to Lexicon's human and mouse gene sequence databases. Under the agreement Lexicon receives subscription fees for database access, and may receive license fees for full-length genes, validated drug targets and protein therapeutics. Lexicon may also receive milestones and royalty payments from future licenses and products.

In July 1998, Lexicon entered into a license agreement with DuPont Pharmaceuticals Company (DuPont), which grants Lexicon a nonexclusive, worldwide license to use DuPont's Cre/lox technology. The agreement also grants Lexicon certain worldwide, royalty-bearing licenses to use the Cre/lox technology together with gene trapping techniques in research collaborations. No royalties have been paid to date under the license agreement.

In March 1997, Lexicon entered into an agreement with Merck Genome Research Institute (MGRI) under which Lexicon received an initial cash payment of $4 million. This payment is recognized as revenue as Lexicon performs its obligations related to such agreement. Under the terms of the subscription agreement with MGRI, Lexicon has agreed to develop, produce and deliver certain knockout mice over a period of three or more years. To date, deferred revenue has been recorded for all cash received from MGRI. Management believes Lexicon's obligations will be satisfied during 2000, and has classified the corresponding deferred revenue amount as a current liability at December 31, 1999.

On September 14, 1995, Lexicon entered into a royalty-bearing, worldwide, exclusive license agreement with Baylor College of Medicine which permits Lexicon to use the technology under said license to grant sublicenses and to make and sell licensed products incorporating or utilizing the technology as defined in the agreement. The agreement requires that Lexicon pay a royalty equal to 2 percent of net sales. For each of the three years in the period ended December 31, 1999, royalties paid under this agreement were less than $6,000.

9. COMMITMENTS AND CONTINGENCIES

Lease Obligations: Lexicon leases office space and certain equipment under operating leases and has financed the acquisition of certain equipment through capital leases with various parties. Rental expense was $410,355, $672,523 and $1,111,039 during the years ended December 31, 1997, 1998 and 1999, respectively. At December 31, 1999, the present value of future minimum capital lease payments and future minimum lease payments under non-cancelable operating leases are as follows:

	CAPITAL LEASES	OPERATING LEASES
2000	$138,295	$ 1,078,143
2001	6,876	1,078,143
2002	--	1,078,143
2003	--	1,172,876
2004	--	1,172,876
Thereafter	--	11,852,120
Total	145,171	$17,432,301
Less: Amount representing interest (implicit rates ranging from 7% to 19%)	11,773	
Present value of remaining lease payments	133,398	
Less: Amount due within one year	127,119	
Capital lease obligations, net of current portion	$ 6,279	

Employment Agreements: In December 1998, October 1999, January 2000 and February 2000, Lexicon entered into employment agreements with some of its corporate officers. Under the agreements, each officer receives a set base salary, subject to adjustment, with an annual discretionary bonus based upon specific objectives to be determined by the compensation committee. The employment agreements are at-will and contain non-competition agreements. The agreements also provide for a termination clause, which requires either a six or 12-month payment based on the officer's salary, in the event of termination or change in corporate control.

10. BENEFIT PLANS

Lexicon has established an Annual Profit Sharing Incentive Plan (the Profit Sharing Plan). The purpose of the Profit Sharing Plan is to provide for the payment of incentive compensation out of the profits of Lexicon to some of its employees. Participants in the Profit Sharing Plan are entitled to a cash bonus equal to their proportionate share (based on salary) of 15 percent of Lexicon's fiscal year pretax income, if any.

Lexicon maintains a retirement and deferred savings plan for its employees that is intended to qualify as a tax-qualified plan under the Internal Revenue Code. The 401(k) Plan provides that each participant may contribute up to a statutory limit, which was $10,000 in 1999.

11. SUBSEQUENT EVENTS (UNAUDITED)

During January and February 2000, Lexicon issued 3,495,900 options to purchase common stock to certain employees and consultants. Lexicon anticipates that additional deferred compensation totaling approximately $60.5 million will be recorded for options granted in the first quarter of 2000. The additional deferred compensation expense will be amortized over the vesting periods of the individual stock options issued. Lexicon expects to record additional amortization expense for deferred compensation as follows: $21.4 million during 2000, $12.7 million during 2001, $12.7 million during 2002, $12.7 million during 2003 and $1.0 million during 2004.

In February 2000, Lexicon adopted the 2000 Equity Incentive Plan (the 2000 Equity Incentive Plan). The 2000 Equity Incentive Plan is an amendment and restatement of the 1995 Stock Option Plan and will terminate in 2010 unless the board terminates it sooner. The board authorized and reserved an aggregate of 11,250,000 shares of common stock for issuance under the 2000 Equity Incentive Plan. The 2000 Equity Incentive Plan provides for the grant of incentive stock options to employees

and nonstatutory stock options to employees, directors and consultants of Lexicon. The plan also provides for stock bonuses and restricted stock purchase awards. Incentive stock options will have an exercise price of 100% or more of the fair market value of our common stock on the date of grant. Nonstatutory stock options may have an exercise price as low as 85% of fair market value on the date of grant. The purchase price of other stock awards may not be less than 85% of fair market value. However, the board may award bonuses in consideration of past services without a purchase payment. Shares may be subject to a repurchase option in the discretion of the board. The 2000 Equity Incentive Plan provides that it will be administered by the board, or a committee appointed by the board, which determines recipients and types of options to be granted, including number of shares under the option and the exercisability of the shares. On the day after each annual meeting of Lexicon's stockholders for ten years, beginning in 2001, the number of shares in the reserve automatically will be increased by the greater of:

- 5% of Lexicon's outstanding shares on a fully-diluted basis; or

- that number of shares that could be issued under awards granted under the incentive plan during the prior 12-month period.

The total number of shares reserved in the aggregate may not exceed 60,000,000 shares over the ten-year period. As of March 15, 2000, options to purchase 8,473,134 shares of common stock were outstanding under the equity incentive plan and 344,865 options had been exercised.

In February 2000, Lexicon adopted the 2000 Non-Employee Directors' Stock Option Plan (the "directors' plan") to provide for the automatic grant of options to purchase shares of common stock to non-employee directors of Lexicon. Lexicon reserved a total of 600,000 shares of its common stock for issuance under the directors' plan. Non-employee directors elected after the closing of Lexicon's initial public offering will receive an initial option to purchase 30,000 shares of common stock. In addition, on the date of each of Lexicon's annual meetings of stockholders, beginning with the annual meeting in 2001, each non-employee director who has been a director for at least six months will automatically be granted an option to purchase 6,000 shares of common stock. On the day after each annual meeting of our stockholders, for 10 years, starting in 2001, the share reserve will automatically be increased by a number of shares equal to the greater of:

- 0.3% of Lexicon's outstanding shares on a fully-diluted basis; or

- that number of shares that could be issued under options granted under the directors' plan during the prior 12-month period.

Options granted under the directors' plan will become vested and exercisable over a period of five years. All options granted under the non-employee directors' plan will have an exercise price equal to the fair market value of our common stock on the date of grant. The option term is ten years. The directors' plan will not be effective until the date of this initial public offering of Lexicon's stock. Therefore, Lexicon has not issued any options under the directors' plan.

In February 2000, the Board of Directors authorized the filing of a registration statement with the Securities and Exchange Commission permitting Lexicon to sell shares of its common stock to the public.

Lexicon sent a written memorandum to its employees informing them that its underwriters would conduct a directed share program as part of this offering and asking that they identify members of their families whom they wished the underwriters to contact in connection with that program. Lexicon did not request any indication from its employees or their family members as to their interest in buying shares in this offering, nor did Lexicon send any communication regarding this offering or the directed share program to their family members. If the memorandum were found to be a prospectus that did not comply with the requirements of the Securities Act, Lexicon could have liability under the Securities Act to persons who received the memorandum and who purchase stock in this offering. This liability could include the right of such persons, for a period of one year from the date of purchase of the common stock, to obtain recovery of the consideration paid for the common stock or if they had already sold the common stock, sue Lexicon for damages resulting from their purchase of common stock. Assuming these persons purchase all of the shares in the directed share program, these refunds or damages could total up to approximately $11.5 million based on the assumed initial public offering price of $23.00, in the event that investors suffer a total loss of their investment during this period and seek refunds or damages. Such recovery of damages could adversely impact Lexicon's liquidity during the period in which a refund is paid. Although there can be no assurance as to the ultimate

disposition of this matter, it is the opinion of Lexicon's management, based upon the information available at this time, that the expected outcome of this matter would not have a material adverse effect on the results of operations and financial conditions of Lexicon. Lexicon's management has not classified any amounts outside of permanent equity as it has concluded that the successful assertion of a claim for recission for this potential violation is remote.

[LEXICON LOGO]

Until , 2000, all dealers that effect transactions in the common stock, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The estimated expenses payable by the Registrant in connection with the issuance and distribution of the securities being registered (other than underwriting discounts and commissions) are as follows:

SEC Registration Fee	$ 72,864
NASD Filing Fee	28,100
NASDAQ Listing Fee	95,000
Printing Expenses	180,000
Accounting Fees and Expenses	200,000
Legal Fees and Expenses	250,000
Transfer Agent and Registrar Fees	10,000
Miscellaneous Expenses	164,036
Total	$1,000,000

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the Delaware General Corporation Law ("DGCL") provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation by reason of the fact that he is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. Section 145 further provides that a corporation similarly may indemnify any such person serving in any such capacity who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee or agent of the corporation or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred in connection with the defense or settlement of such action or suit if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or such other court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Delaware Court of Chancery or such other court shall deem proper.

Lexicon's certificate of incorporation and bylaws provide that indemnification shall be to the fullest extent permitted by the DGCL for all current or former directors or officers. As permitted by the DGCL, the certificate of incorporation provides that directors of Lexicon shall have no personal liability to Lexicon or its stockholders for monetary damages for breach of fiduciary duty as a director, except (1) for any breach of the director's duty of loyalty to Lexicon or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or knowing violation of law, (3) under Section 174 of the DGCL or (4) for any transaction from which a director derived an improper personal benefit.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.

Set forth in chronological order below is information regarding the number of shares of common and preferred stock issued, and the number of options granted, by the Registrant since January 1, 1997. Further included is the consideration, if any, received by the Registrant for such shares and options, and information relating to the section of the Securities Act, or rule of the SEC, under which exemption from registration was claimed. All awards of options did not involve any sale under the Securities Act and none of these securities were registered under the Securities Act.

1. In the past three years, the Registrant has issued options to purchase an aggregate of 5,572,461 shares of common stock at a weighted average exercise price of $1.68 per share. During this same time period, the Registrant has issued a total of 119,883 shares of common stock pursuant to the exercise of options previously granted.

2. On January 6, 1997, Lexicon sold to Gordon A. Cain 240,000 shares of common stock pursuant to a June 1996 subscription agreement at a purchase price of $1.67 per share.

3. On January 27, 1997, Lexicon sold to Gordon A. Cain 240,000 shares of common stock pursuant to a June 1996 subscription agreement at a purchase price of $1.67 per share.

4. In February 1997, Lexicon sold to Gordon A. Cain 240,000 shares of common stock pursuant to a June 1996 subscription agreement at a purchase price of $1.67 per share.

5. In March 1997, Lexicon sold to Gordon A. Cain 240,000 shares of common stock pursuant to a June 1996 subscription agreement at a purchase price of $1.67 per share.

6. In April 1997, Lexicon sold to Gordon A. Cain 240,000 shares of common stock pursuant to a June 1996 subscription agreement at a purchase price of $1.67 per share.

7. In May 1997, Lexicon sold to Gordon A. Cain 240,000 shares of common stock pursuant to a June 1996 subscription agreement at a purchase price of $1.67 per share.

8. In June 1997, Lexicon sold to Gordon A. Cain 240,000 shares of common stock pursuant to a June 1996 subscription agreement at a purchase price of $1.67 per share.

9. In July 1997, Lexicon sold to Gordon A. Cain 90,000 shares of common stock pursuant to a June 1996 subscription agreement at a purchase price of $1.67 per share.

10. In August 1997, Lexicon issued to William A. McMinn 135,000 warrants with an exercise price of $2.50 per share in connection with a $1,000,000 note.

11. In August 1997, Lexicon issued to Carter Interests Ltd. 13,500 warrants with an exercise price of $2.50 share in connection with a $100,000 note.

12. In May 1998, Lexicon sold 4,244,664 shares of series A convertible preferred stock to 30 accredited investors in connection with venture capital financing at a purchase price of $7.50 per share.

13. In May 1998, Lexicon issued to Punk, Ziegel & Company 605,001 warrants with an exercise price of $2.50 per share in connection with venture capital financing.

14. In July 1998, Lexicon issued to The Woodlands Commercial Properties, L.P. 249,999 warrants with an exercise price of $2.50 per share in connection with a lease option.

Except as described above, no underwriters were engaged in connection with the foregoing sales of securities. The sales of shares of common stock, series A preferred stock and other securities listed above were made in reliance upon the exemption from registration set forth in Section 4(2) of the Securities Act and Rule 506 of Regulation D promulgated thereunder for transactions not involving a public offering and all purchasers were accredited investors as such term is defined in Rule 501(a) of Regulation D. Issuances of options to the company's employees and directors were made pursuant to Rule 701 promulgated under the Securities Act. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act.

ITEM 16. EXHIBITS.

a. Exhibits:

1.1**	-- Form of Underwriting Agreement
3.1**	-- Restated Certificate of Incorporation
3.2**	-- Restated Bylaws
5.1**	-- Opinion of Andrews & Kurth L.L.P.
10.1**	-- Employment Agreement with Arthur T. Sands, M.D., Ph.D.
10.2**	-- Employment Agreement with James R. Piggott, Ph.D.
10.3**	-- Employment Agreement with Jeffrey L. Wade, J.D.
10.4**	-- Employment Agreement with Brian P. Zambrowicz, Ph.D.
10.5**	-- Employment Agreement with Julia P. Gregory
10.6**	-- Employment Agreement with Randall B. Riggs
10.7**	-- Form of Indemnification Agreement with Officers and Directors
10.8**	-- 2000 Equity Incentive Plan
10.9**	-- 2000 Non-Employee Directors' Stock Option Plan

10.10*	--	Database Access Agreement, dated October 5, 1999, between Lexicon and Millennium Pharmaceuticals, Inc.
10.11+	--	Agreement, dated March 21, 1997, between Lexicon and Merck Genome Research Institute
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21.1**	--	Subsidiaries of Lexicon
23.1**	--	Consent of Arthur Andersen LLP
23.2**	--	Consent of Andrews & Kurth L.L.P. (contained in Exhibit 5.1)
24.1**	--	Power of Attorney (contained in signature page)
27.1**	--	Financial Data Schedule

- ---------------

** Previously filed.

+ Confidential treatment has been requested for a portion of this exhibit.

* The Database Access Agreement will terminate in April 2000 and is no longer material to the Company. Therefore, this Exhibit 10.10 has been withdrawn.

b. Financial Statement Schedules

ITEM 17. UNDERTAKINGS.

The undersigned Registrant hereby undertakes:

(a) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 14, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(b) To provide to the underwriter(s) at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriter(s) to permit prompt delivery to each purchaser.

(c) For purpose of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in the form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(d) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of The Woodlands, in the State of Texas, on April 6, 2000.

LEXICON GENETICS INCORPORATED

By: *

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

PURSUANT TO THE REQUIREMENTS OF THE SECURITIES ACT OF 1933, AS AMENDED, THIS REGISTRATION STATEMENT HAS BEEN SIGNED BELOW BY THE FOLLOWING PERSONS IN THE CAPACITIES AND ON THE DATES INDICATED BELOW.

SIGNATURE	TITLE	DATE
*	President, Chief Executive Officer and Director (principal executive officer)	April 6, 2000
Arthur T. Sands, M.D., Ph.D.		
*	Executive Vice President and Chief Financial Officer (principal financial and accounting officer)	April 6, 2000
Julia P. Gregory		
/s/ JEFFREY L. WADE, J.D.	Executive Vice President and General Counsel	April 6, 2000
Jeffrey L. Wade, J.D.		
/s/ C. THOMAS CASKEY, M.D.	Chairman of the Board of Directors	April 6, 2000
C. Thomas Caskey, M.D.		
*	Director	April 6, 2000
William A. McMinn		
*	Director	April 6, 2000
Stephen J. Banks		
*	Director	April 6, 2000
Gordon A. Cain		
*	Director	April 6, 2000
Patricia M. Cloherty		
*	Director	April 6, 2000
Paul Haycock, M.D.		
*	Director	April 6, 2000
Sam L. Barker, Ph.D.		

*By: /s/ JEFFREY L. WADE, J.D.

Jeffrey L. Wade, J.D.
Pursuant to powers-of-attorney
filed with
the Registration Statement on
Form S-1
(333-96469) on February 9, 2000,

March 1, 2000, March 17, 2000
and April 6, 2000.

POWER OF ATTORNEY

The person whose signature appears below appoints Arthur T. Sands and Jeffrey L. Wade, and each of them, any of whom may act without the joinder of the other, as his true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement and any Registration Statement (including any amendment thereto) for this offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he might or would do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute and substitutes, may lawfully do or cause to be done by virtue hereof.

PURSUANT TO THE REQUIREMENTS OF THE SECURITIES ACT OF 1933, AS AMENDED, THIS REGISTRATION STATEMENT HAS BEEN SIGNED BELOW BY THE FOLLOWING PERSON IN THE CAPACITIES AND ON THE DATE INDICATED BELOW.

By: /s/ C. THOMAS CASKEY

C. Thomas Caskey

Director

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
1.1**	-- Form of Underwriting Agreement
3.1**	-- Restated Certificate of Incorporation
3.2**	-- Restated Bylaws
5.1**	-- Opinion of Andrews & Kurth L.L.P.
10.1**	-- Employment Agreement with Arthur T. Sands, M.D., Ph.D.
10.2**	-- Employment Agreement with James R. Piggott, Ph.D.
10.3**	-- Employment Agreement with Jeffrey L. Wade, J.D.
10.4**	-- Employment Agreement with Brian P. Zambrowicz, Ph.D.
10.5**	-- Employment Agreement with Julia P. Gregory
10.6**	-- Employment Agreement with Randall B. Riggs
10.7**	-- Form of Indemnification Agreement with Officers and Directors
10.8**	-- 2000 Equity Incentive Plan
10.9**	-- 2000 Non-Employee Directors' Stock Option Plan
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** Previously filed.

+ Confidential treatment has been requested for a portion of this exhibit.

* The Database Access Agreement will terminate in April 2000 and is no longer material to the Company. Therefore, this Exhibit 10.10 has been withdrawn.

CONFIDENTIAL TREATMENT REQUESTED EXHIBIT 10.11

AGREEMENT

This Agreement (the "AGREEMENT") is made as of March 21, 1997 (the "EFFECTIVE DATE"), by and among Lexicon Genetics, Inc., a Delaware corporation having its principal offices at 4000 Research Forest Drive, The Woodlands, Texas 77381 ("LEXICON") and Merck Genome Research Institute, a Delaware not-for-profit corporation having its principal offices at 770 Sumneytown Pike, West Point, Pennsylvania 19486 ("MGRI").

PRELIMINARY STATEMENT

WHEREAS, MGRI is a non-profit corporation dedicated to the support of research regarding the genome, and in furtherance of such research provides support to various nonprofit research organizations which are doing research with regard to the genome; and

WHEREAS, Lexicon is conducting research to develop a proprietary library of embryonic stem cell clones containing mutations in genes designed to accelerate genomic research which it calls "OmniBankTM "; and

WHEREAS, Lexicon owns or has rights to, and expertise in, certain methods of producing "Mutant Mice", as defined herein, derived from OmniBankTM; and

WHEREAS, MGRI intends to distribute or contribute the Mutant Mice to one or more not-for-profit organizations ("NFP") which will distribute the Mutant Mice for "Research" as defined herein; and

WHEREAS, MGRI is willing to pay Lexicon to produce Mutant Mice for such distribution and Lexicon is willing to produce such Mutant Mice;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants contained in this Agreement, the parties agree as follows:

ARTICLE I

1. DEFINITIONS

Capitalized terms used in this Agreement, both in the singular and the plural, which are not otherwise defined herein shall have the following respective meanings:

- ----------

***** denotes confidential information with respect to which a separate confidential treatment request has been filed with the Securities and Exchange Commission.

1.1 "CLAIM" means any pending or threatened claim, demand, investigation, cause of action, suit, default, assessment, litigation, third party action, arbitration proceeding or proceeding by or before any governmental authority or any other Person.

1.2 "CONFIDENTIAL INFORMATION" shall mean any information which either party or a member ("Member") of the Mutation Selection Committee has treated as confidential, including but not limited to information relating to OmniBankTM , which information is disclosed by either party or a Member to MGRI and/or Lexicon, as necessary or useful to the parties under this Agreement and which has been designated in writing by the disclosing party as Confidential Information at the time of such disclosure. Confidential Information shall specifically include any information disclosed by or among the parties or their agents during the negotiations for this Agreement. Confidential Information does not include, however, any information which (i) was rightfully in the possession of the receiving party prior to the date of disclosure to it, (ii) was in the public domain prior to the date of disclosure, (iii) becomes part of the public domain by publication or by other means, except through an unauthorized act or omission on the part of the receiving party or any other Person, (iv) is supplied to the receiving party without restriction by a Third Party who is under no obligation to the disclosing party to maintain such information in confidence or (v) any information developed independently by or for the receiving party, provided, however, that it is conclusively established that such information was independently developed.

1.3. "LEXICON INTELLECTUAL PROPERTY" shall mean all trade secrets, know-how, patents, patent applications, trademarks, copyrights and other intellectual property of any type owned or controlled by Lexicon as of the Effective Date or in the future, including, without limitation, Confidential Information, which is necessary or useful to the parties in performing the work required or permitted under this Agreement.

1.4 "LIABILITY" means, with respect to any Person, any indebtedness, obligation and other liability of such Person, whether absolute, accrued, contingent, fixed or otherwise, or whether due or to become due.

1.5 "LOSSES" means any and all damages (including consequential, punitive and exemplary), fines, penalties, judgments, deficiencies, losses, costs and expenses, including court costs, reasonable fees of attorneys, accountants and other experts and other reasonable expenses associated with any Claim.

1.6 "MUTANT MICE" shall mean a line of mice heterozygous for a Standard Mutation, chosen by the Mutation Selection Committee, wherein such mice transmit the Standard Mutation, in the form of a mutant allele, through the germ line.

1.7 "MUTATION SELECTION COMMITTEE" and "COMMITTEE" shall mean *****.

1.8 "OMNIBANK(TM)" shall mean Lexicon's proprietary library of embryonic stem cell clones containing mutations in particular genes, which genes are identified by DNA sequence.

1.9 "RESEARCH" shall mean research which does not relate to the sale, lease, license or other transfer of the Mutant Mice or to the sale of services involving the use of the Mutant Mice.

1.10 "PERSON" means any individual, firm, corporation, trust, association, company, limited liability company, joint stock company, partnership, joint venture, governmental authority or other entity or enterprise.

1.11 "SET" shall mean up to ***** of Mutant Mice which are heterozygous for one selected Standard Mutation.

1.12 "STANDARD MUTATION" shall mean a gene trap insertion generated as part of Lexicon's OmniBankTM program for a specific gene.

1.13 "THIRD PARTY" shall mean any Person other than Lexicon, MGRI or NFP.

ARTICLE II

2. DEVELOPMENT

2.1 DEVELOPMENT. Lexicon hereby agrees to generate and develop 150 different Sets of Mutant Mice (i.e., each Set shall have a different Standard Mutation) pursuant to the terms herein.

2.2 GENERATION OF STANDARD MUTATIONS. Upon the Effective Date, Lexicon will commence the generation of Standard Mutations in embryonic stem cells for the production of the Mutant Mice from OmniBankTM. Lexicon will generate Standard Mutations for the production of Mutant Mice no later than the date of the first meeting of the Mutation Selection Committee. Lexicon will continue to generate Standard Mutations for no less than two years after the first annual anniversary of the Effective Date unless such work is completed earlier.

2.3 SELECTION OF THE STANDARD MUTATIONS. The Mutation Selection Committee shall meet to select the Standard Mutations to be included in each group of Mutant Mice to be produced by Lexicon hereunder. Such meetings shall be coordinated by Lexicon and called and administered by MGRI. The first meeting shall be held no sooner than ***** after the Effective Date, and subsequent meetings shall be held no more frequently than every ***** thereafter unless otherwise agreed to by the parties hereto. Sufficiently in advance of each such meeting to enable Committee review and preparation, Lexicon shall provide the Committee with all information, including Confidential Information, necessary or useful to the Committee in performing its selections of Standard Mutations and concerning the Standard Mutations that have been generated by Lexicon up to that time. MGRI shall designate a Chairperson of the Committee. At each meeting Lexicon shall report to the Committee all of the Standard Mutations that have been generated up to that time; provided, however, Lexicon shall not be required to include in such report Standard Mutations for which Lexicon has, at such time, entered into an agreement with a Third Party for the production of Mutant Mice with such Standard Mutations. The Committee shall discuss the Standard Mutations listed in the report and choose from that list those Standard Mutations to be included in the next group of Mutant Mice to be produced by Lexicon as provided in Section 2.4; provided, however, that the Committee shall not knowingly select a Standard Mutation which has already been the subject of published data from Third Parties including, without limitation, patents, published patent applications, or presented or published research. Subject in all cases to the confidentiality provisions herein, the Committee may, in its discretion, solicit advice from Third Parties regarding the appropriate fields of research and Standard Mutations to consider for selection.

2.3.1 At each meeting, the Mutation Selection Committee shall choose that number of Standard Mutations equal to ***** in accordance with Section 2.4. The Committee shall determine the process by which it selects the Standard Mutations to be incorporated in the Mutant Mice. In addition to the selected Standard Mutations, the Committee shall provide Lexicon with a list of not fewer than ***** alternate Standard Mutations. If Lexicon is unable to produce a Mutuant Mouse with a given selected Standard Mutation due to third party rights, as provided in Section 4.4 or nonviability of the heterozygous Mutant Mice, as provided in Section 2.4, the next listed alternate Standard Mutation shall become a selected Standard Mutation in lieu of the original selected Standard Mutation.

2.3.2 The Committee shall immediately notify Lexicon in writing of its selections. A Committee selection may not be withdrawn or modified if Lexicon has begun working on such selection, except with the written consent of Lexicon, which may be withheld in its sole reasonable discretion.

2.3.3 If for any reason the Committee fails to meet and notify Lexicon of its selections within the time provided above, the delivery date for the corresponding group of Mutant Mice shall be delayed an equivalent amount of time.

2.4 PRODUCTION OF MUTANT MICE. Lexicon will commence production of each group of Mutant Mice within ***** of receiving notification of the Mutation Selection Committee's decisions. Lexicon will complete the production of ***** selected by the Mutation Selection Committee, no later than ***** anniversary of the Effective Date, an additional group of ***** no later than the ***** anniversary of the Effective Date and ***** no later than each of ***** anniversaries of the Effective Date. If the nature of any of the Standard Mutations chosen prevents the production of a living Mutant Mouse heterozygous for such Standard Mutation, the parties hereto shall evaluate such conclusion and shall agree that either an alternate Standard Mutation shall be substituted for such selected Standard Mutation or Lexicon shall be deemed to have met its obligations hereunder by production and delivery of an embryonic stem cell with the original Standard Mutation.

2.5 SELECTION OF NFP. MGRI will select, after consultation with Lexicon, one or more not-for-profit organizations to act as the NFP. Such selection shall be made no later than the first anniversary of the Effective Date.

2.6 DELIVERY OF MUTANT MICE. Upon the birth of the first generation of any type of Mutant Mouse hereunder and provided such litter contains at least ***** Mutant Mice, Lexicon shall deliver one-half of such litter, dividing the males and females as evenly as possible, to MGRI or NFP. Delivery shall be in accordance with MGRI's, NFP's and Lexicon's mouse transfer policies. Lexicon shall certify to MGRI and NFP that each Mutant Mouse is heterozygous for the identified Standard Mutation. If the first generation litter does not include ***** Lexicon shall deliver breeding pairs from the second generation. Lexicon shall not be obligated to deliver a full Set for any Standard Mutation unless NFP or MGRI requests such a delivery. Normal packing and shipping costs for delivery by public carrier to MGRI and NFP shall be at Lexicon's expense. MGRI or NFP may elect, at its sole expense, to provide for an alternative delivery method.

2.7 BACK-UP COLONY. Lexicon shall maintain a back-up colony of ***** for each Standard Mutation for a minimum of *****.

2.8 PROJECT MANAGERS. Each party shall identify an employee who is the Project Manager for the work contemplated by this Agreement. The Project Managers shall be responsible for the coordination of his or her employer's efforts hereunder with the other parties and resolving, if possible, any issues or problems which arise. A party may replace its Project Manager at any time in its sole discretion.

2.9 OWNERSHIP/LICENSE GRANT.

2.9.1 Subject to the license granted below, Lexicon shall own and retain all rights to the Mutant Mice, including, but not limited to, the rights to produce, breed, sell or license the Mutant Mice and Lexicon Intellectual Property, as well as all inventions or discoveries made solely by its employees in the course of producing the Mutant Mice.

2.9.2 Lexicon hereby grants to MGRI a worldwide exclusive license under the Lexicon Intellectual Property, sublicensable by it consistent with its not-for-profit status, to use and breed, have bred, and to distribute the Mutant Mice for Research. MGRI and/or NFP shall notify all recipients of the Mutant Mice in writing of the restrictions on use of the Mutant Mice under Section 4.2 and shall upon delivering any Mutant Mice to a Third Party provide Lexicon with the name and address of such party and the type of Mutant Mouse delivered. Notwithstanding the foregoing license grant, Lexicon reserves to itself and its "Collaborators", as hereinafter defined, a personal, nontransferable right to breed, have bred and use (but not distribute) Mutant Mice for Research. "Collaborator" shall mean any Third Party with whom Lexicon enters into an agreement to perform cooperative Research. Collaborators shall agree to use the Mutant Mice only in performing the collaborative Research with Lexicon and shall acknowledge in writing the limitations of Section 4.2(i) and 4.2(ii). Lexicon shall not enter into any cooperative Research agreement for a particular Mutant Mouse with a Collaborator prior to the date on which MGRI or NFP makes such Mutant Mouse publicly available.

2.9.3 Except for the license granted in this Section 2.9, Lexicon does not grant to MGRI or NFP any license under the Lexicon Intellectual Property.

2.10 DISTRIBUTION. MGRI shall use, and agrees to require NFP to use, reasonable efforts to ensure wide spread availability and distribution of the Mutant Mice for Research.

ARTICLE III

3. PAYMENT.

3.1 PAYMENT TO LEXICON. Subject to the terms and conditions set forth in this Agreement, in consideration of the development, production and delivery to MGRI and/or NFP of the Mutant Mice as provided herein, MGRI agrees to pay Lexicon a total of Eight Million Dollars in accordance with the schedule set forth in Exhibit A.

3.1.1 All payments which are required to be made to Lexicon upon delivery of Mutant Mice to MGRI or NFP shall occur only after receipt of certification from Lexicon that each delivered Set of Mutant Mice is heterozygous for the selected Standard Mutation and, in the event of delivery to NFP, after NFP certifies in writing to MGRI that it has received the Mutant Mice and Lexicon's certification. NFP shall send its certification to MGRI as promptly as possible after receipt of the Mutant Mice, with a copy to Lexicon, but in no event later than ***** after NFP has physically received the Mutant Mice.

3.1.2 All payments may be made by check delivered to Lexicon at its principal offices at The Woodlands, Texas, or by wire transfer to an account identified in writing sufficiently in advance by Lexicon.

3.2 COSTS INCURRED BY COMMITTEE. MGRI shall reimburse all reasonable costs incurred by the Mutation Selection Committee in performing its duties hereunder, including, without limitation, Members' reasonable travel costs and other reasonable Committee meeting expenses. In determining whether costs are reasonable, MGRI shall apply the same standards that it applies to consultants and employees working for MGRI who travel at MGRI's request. To avoid misunderstandings, the Chairperson of the Mutation Selection Committee shall advise MGRI in writing of any expenses that the Committee anticipates incurring in connection with a meeting other than travel, hotel and meals at least 30 days prior to the meeting.

3.3 LATE PAYMENT. If any payment due hereunder is not made when due, Lexicon shall notify MGRI and NFP by letter, advising them that, at Lexicon's option, upon the expiration of ***** from the date of such letter, Lexicon may cease work on the production of Mutant Mice and/or cease delivery of Mutant Mice until such late payment has been made by MGRI.

ARTICLE IV

4. COVENANTS AND CONDITIONS

4.1 BEST COMMERCIALLY REASONABLE EFFORTS. Lexicon shall use its best commercially reasonable efforts to produce and deliver the Mutant Mice in accordance with the terms of this Agreement. MGRI recognizes that the production of the Mutant Mice involves a number of technologically complex steps and that technical obstacles from time to time on occasion may prevent Lexicon from producing some of the Mutant Mice on the schedule provided for herein. Lexicon shall immediately notify the Committee, MGRI and NFP of any such technical obstacle encountered and its analysis of whether the obstacle can be overcome and the time required to do so. If, after consultation with NFP and MGRI, Lexicon determines that production of such Mutant Mice within the time periods provided

for herein is not feasible using its best commercially reasonable efforts, Lexicon may notify MGRI and NFP in writing that it is extending the relevant delivery date to a date that can be accomplished using its best commercially reasonable efforts. Such amended delivery date shall then be substituted for the original date currently provided in Section 2.2, provided however that under no circumstances shall any date be extended for more than one year from its original date currently provided in Section 2.2.

4.2 RESTRICTIONS ON USE OF MUTANT MICE. MGRI agrees to use the Mutant Mice only for Research and otherwise only as is consistent with MGRI's not-for-profit status. NFP and MGRI may provide any of the Mutant Mice that NFP receives to Third Party researchers for use in Research, provided that each such Third Party acknowledges in writing that (i) no right is granted to further sell, lease, license or otherwise transfer the Mutant Mice provided or any of their progeny, however produced; and (ii) the Mutant Mice are provided for Research purposes only. NFP and/or MGRI shall require each recipient of Mutant Mice to agree to indemnify, defend and hold harmless all the parties hereto from and against any and all claims, losses, liabilities and damages arising from or related to the recipient's use of the Mutant Mice.

4.3 NO INFRINGEMENT OF THIRD PARTY RIGHTS. Lexicon shall not be obligated to generate any Standard Mutation or produce or deliver any Mutant Mouse or embryonic stem cell if Lexicon reasonably believes, with the advice of its patent counsel and after consultation with NFP and the Committee, such action would infringe upon the intellectual property rights of a Third Party. In such event, Lexicon shall consult with NFP and the Committee to achieve an acceptable solution including but not limited to the generation of a non-infringing Standard Mutation and the production of non-infringing Mutant Mice. If no acceptable solution is reasonably available, MGRI may exercise its right to terminate this Agreement pursuant to Section 8.3.

ARTICLE V

5. CONFIDENTIALITY

5.1 In the course of producing and delivering the Mutant Mice, the parties hereto and the Members of the Committee may disclose Confidential Information to a party, NFP and/or to the Members of the Committee as necessary and useful to the performance of the parties' obligations and to enable the parties to realize their respective benefits under this Agreement. The parties receiving Confidential Information shall not disclose any of the Confidential Information to any Third Party or use any of the Confidential Information for their own benefit or any Third Party's benefit except as expressly permitted hereunder. Members shall not further disclose Confidential Information; provided however that Members who are also employees of NFP may disclose such Confidential Information to other employees and

consultants who have a need to know such Confidential Information in order to perform this Agreement, provided that such other NFP employees and consultants agree in writing to maintain such Confidential Information in confidence in accordance with the terms of this Agreement.

5.2 NFP and Members shall sign a Confidentiality Agreement in a form satisfactory to Lexicon and MGRI.

5.3 Except as otherwise provided or permitted herein, upon expiration or termination of this Agreement, NFP, the Members and any party receiving Confidential Information shall destroy or deliver to the disclosing party any and all documents (including all copies) containing Confidential Information which are then in their possession (if any), and, at the disclosing party's request, shall certify that all such documents have been destroyed or delivered to the disclosing party and that they do not retain any such documents or any copies thereof; provided, however, that Lexicon, NFP and MGRI may retain one copy of each such document for record purposes only. The confidentiality obligations set forth in this Section will remain in effect for ten (10) years.

5.4 Lexicon may require any Third Party receiving a Mutant Mouse to agree in writing to similar confidentiality provisions prior to being given any Confidential Information.

5.5 The terms of this Agreement shall be treated as Confidential Information and shall not be disclosed to anyone (except for the parties' respective employees, consultants, agents and attorneys assisting in the review and negotiation of this Agreement who have a need to know the terms of this Agreement) without the written permission of MGRI and Lexicon. Notwithstanding the foregoing, the parties intend to jointly announce the execution of this Agreement and the results of other activities pursuant to this Agreement. Such announcements shall first be agreed upon by the parties in writing and may include disclosure of the amounts paid or to be paid to Lexicon hereunder and the number of Mutant Mice to be produced hereunder. If either party desires to release a separate announcement relating to this Agreement, it shall first allow the other party to approve in writing such proposed announcement; such approval shall not be unreasonably delayed or denied.

ARTICLE VI

6. WARRANTIES AND LIMITATIONS

6.1 Lexicon represents and warrants to MGRI that as of the Effective Date:

6.1.1 to the best of Lexicon's knowledge, Lexicon Intellectual Property existing as of the Effective Date is subsisting and are not invalid or unenforceable, in whole or in part;

6.1.2 it has the full right, power and authority to enter into this Agreement;

6.1.3 to the best of Lexicon's knowledge, Lexicon Intellectual Property practiced as anticipated herein for the creation of Mutant Mice does not infringe on any intellectual property rights owned by any Third Party, and does not result from a misappropriation by Lexicon of any property owned by any Third Party;

6.1.4 to the best of Lexicon's knowledge, there are no claims, liabilities, losses, judgments or settlements by or against Lexicon relating to OmniBank or affecting the Lexicon Intellectual Property or that would operate to prevent Lexicon from fulfilling its obligations in whole or in part under this Agreement;

6.1.5 to the best of Lexicon's knowledge, the information Lexicon has provided to MGRI during the negotiation of this Agreement is true and correct as of the Effective Date;

6.1.6 during the course of producing the Standard Mutations and Mutant Mice, Lexicon will not knowingly infringe any valid patents; provided, however, Lexicon shall not be obligated to undertake any review or investigation to confirm that no such infringement exists;

6.1.7 each Mutant Mouse delivered to NFP shall be heterozygous for one of the selected Standard Mutations and, subject to the terms and conditions of this Agreement, it shall deliver a Set of the Mutant Mice for each selected Standard Mutation.

6.2. MGRI represents and warrants to Lexicon that as of the Effective Date it has the full right, power and authority to enter into this Agreement.

6.3 EXCEPT FOR THOSE REPRESENTATIONS AND WARRANTIES SET FORTH IN THIS SECTION 6, LEXICON MAKES NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE MUTANT MICE. NOTWITHSTANDING ANYTHING CONTAINED HEREIN TO THE CONTRARY, LEXICON MAKES NO REPRESENTATION OR WARRANTY THAT ALL PATENT RIGHTS OF THIRD PARTIES WHICH MAY BE REQUIRED TO MAKE OR USE MUTANT MICE, IF ANY, HAVE BEEN SECURED. NOTWITHSTANDING THE ABOVE, LEXICON AGREES TO DISCLOSE TO NFP AND MGRI ANY THIRD PARTY RIGHTS, INCLUDING WITHOUT LIMITATION INTELLECTUAL PROPERTY RIGHTS, WHICH BECOME KNOWN TO LEXICON WHICH MAY BE REQUIRED TO AVOID CONFLICT WITH THE TERMS OF THIS AGREEMENT OR WHICH WOULD OBSTRUCT OR PREVENT

USE OF THE MUTANT MICE BY NFP, MGRI OR THIRD PARTIES. LEXICON SHALL NOT BE LIABLE FOR, OR RESPONSIBLE FOR, OBTAINING OR PAYING THE COSTS OF ANY LICENSE FROM ANY THIRD PARTY WHICH MAY BE REQUIRED TO PRODUCE OR USE ANY OF THE MUTANT MICE. IF LEXICON DETERMINES SUCH A LICENSE IS REQUIRED, IT MAY TERMINATE PRODUCTION OF SUCH MUTANT MOUSE WITHOUT PENALTY UNLESS NFP OR MGRI OBTAINS THE REQUIRED LICENSE AT ITS SOLE EXPENSE.

6.4 NONE OF THE PARTIES HERETO SHALL HAVE ANY LIABILITY WITH REGARD TO ANY CLAIM ARISING OUT OF OR RELATING TO THIS AGREEMENT EXCEPT FOR A CLAIM OF A MATERIAL BREACH OF ITS OBLIGATIONS HEREUNDER.

ARTICLE VII

7. INDEMNIFICATION

Each party (the "Indemnifying Party") agrees to indemnify, defend and hold harmless, to the fullest extent permitted by law, the other party, their affiliates, directors, officers, shareholders, employees, agents, attorneys and each of the Members (collectively, the "Indemnified Persons"), from and against any and all Claims, Liabilities and Losses which may be imposed on, incurred by or asserted against any Indemnified Person arising out of or resulting from, directly or indirectly any material breach of this Agreement by the Indemnifying Party; provided, however, that an Indemnifying Party shall not be liable for any portion of any Claims, Liabilities or Losses resulting from a material breach by the Indemnified Person of its obligations under this Agreement or from the gross negligence, fraud or intentional misconduct of the Indemnified Person or related Indemnified Persons.

ARTICLE VIII

8. TERMINATION AND RIGHTS UPON TERMINATION

8.1 MGRI shall have the right to terminate this Agreement on 60 days written notice in the event that:

8.1.1 Lexicon fails or is unable to provide the Committee with at least 500 Standard Mutations to consider for selection at the first Committee Meeting, and 1,000 Standard Mutations to consider for selection at each subsequent meeting of the Committee;

8.1.2 Lexicon fails or is unable to deliver at least 40 sets of Mutant Mice with the selected Standard Mutations acceptable to NFP in accordance with this Agreement within three years of the Effective Date;

8.1.3 Lexicon has failed or has been unable to deliver 150 sets of Mutant Mice acceptable to NFP in accordance with this Agreement by the sixth annual anniversary of the Effective Date;

8.1.4 Lexicon's delivery of Mutant Mice fail to comply with the delivery procedures, to be agreed upon by Lexicon, NFP and MGRI, on more than three occasions; or

8.1.5 Lexicon materially breaches this Agreement and fails to cure such breach within thirty (30) days or, if such breach cannot reasonably be cured within thirty (30) days commences to cure such breach within thirty (30) days and diligently completes such cure.

Termination pursuant to this provision shall be effective on the sixtieth day after notice to Lexicon ("Termination Date").

8.2 Lexicon may terminate this Agreement effective thirty (30) days after notice has been given to each of NFP and MGRI in the event that Lexicon has performed all of its obligations under this Agreement and MGRI fails to make the payments required in accordance with the terms of this Agreement.

8.3 MGRI shall have the right to terminate this Agreement on thirty (30) days notice if either (a) MGRI and the Committee determine that they cannot identify, from the list of Standard Mutations reported by Lexicon, any Standard Mutations of scientific interest to use in the production of Mutant Mice, or (b) MGRI determines, in its sole discretion and after consultation with Lexicon and NFP, that performance of the Agreement by any party infringes on the intellectual property rights of a third party and MGRI also determines, in its sole discretion and after consultation with Lexicon and NFP, that a license to such rights is not available on economically reasonable terms.

8.4 In the event of a termination of this Agreement pursuant to Section 8.1 or 8.3(a), the amount due to Lexicon pursuant to this Agreement shall be calculated as follows: ((number of Sets and partial Sets accepted under Section 2.6 delivered to and accepted by NFP) divided by 120) x ($8,000,000) (the "Total Payment"). If Lexicon has received more than the Total Payment from MGRI, it shall return the balance within 30 days after the Termination Date to MGRI. If Lexicon has received less than the Total Payment, MGRI shall pay Lexicon the difference between the amount already paid to Lexicon and the Total Payment within 30 days of the Termination Date.

8.5 In the event of termination of this Agreement pursuant to Section 8.3(b) the parties shall review the status of the work hereunder at the time of termination and the costs expended and negotiate in good faith the amounts to be paid or re-paid, as the case may be, by one party to the other.

8.6 In the event of termination of this Agreement pursuant to Section 9.7, Lexicon shall provide MGRI with a written accounting of funds expended pursuant to this Agreement (the "Total Costs"). If Lexicon has received payments hereunder in excess of the Total Costs Lexicon shall with such written accounting refund to MGRI the amount of such excess.

8.7 The rights and obligations under Sections 2.7, 4.3, Article 5, Sections 6.3, 6.4, Article 7, Sections 8.4, 8.5, 8.6, 9.6 and 9.11 shall survive termination of this Agreement by any party for any reason, delivery and payment for all of the Mutant Mice to be delivered hereunder and any expiration of this Agreement.

ARTICLE IX

9. MISCELLANEOUS

9.1 COMPLIANCE WITH LAWS. Lexicon acknowledges, and NFP shall acknowledge, that it is subject to and agrees to abide by all laws (including the Export Administration Act of 1979 and Arms Export Control Act) controlling the export of technical data, computer software, laboratory prototypes, biological material and other commodities. The transfer and/or export of any of such items may require a license from Governmental Authorities or written assurances by NFP, Lexicon or a Third Party requesting a Mutant Mouse that it shall not export such items to certain foreign countries without prior approval of such Governmental Authorities. MGRI acknowledges and agrees that Lexicon is not making any representation or warranty herein as to the existence or absence of any such requirement or that, if any such requirement exists, that it will be issued.

9.2 NOTICES. Any and all notices, requests or other communications hereunder shall be given in writing and delivered by (a) regular, overnight or registered or certified mail (return receipt requested), with first class postage prepaid, (b) hand delivery, (c) facsimile transmission or (d) overnight courier service, to the parties at the addresses or facsimile numbers provided on the signature page hereto, or at such other addresses or numbers as shall be designated by any party in a notice to the other parties given in accordance with this Section 9.2. Except as otherwise provided in this Agreement, all such communications shall be deemed to have been duly given, (A) in the case of a notice sent by regular mail, on the date actually received by the addressee, (B) in the case of a notice sent by registered or certified mail, on the date received (or refused) as shown on the return receipt, (C) in the case of a notice delivered by hand, when personally delivered, (D) in the case of a notice sent by facsimile, upon transmission subject to telephone confirmation of receipt, and (E) in the case of a notice sent by overnight mail or overnight courier service, the date delivered at the designated address, in each case given or addressed as aforesaid.

9.3 BENEFIT AND BURDEN. This Agreement shall inure to the benefit of, and shall be binding upon, the parties and their respective successors and any permitted assigns.

9.4 NO THIRD PARTY RIGHTS. Nothing in this Agreement shall be deemed to create any right in any creditor or other Person other than the Indemnified Parties pursuant to Article VII, and this Agreement shall not be construed in any respect to be a contract in whole or in part for the benefit of any third party (other than the Indemnified Parties).

9.5 AMENDMENTS AND WAIVER. No amendment, modification, restatement or supplement of this Agreement shall be valid unless the same is in writing and signed by the parties hereto. No waiver of any provision of this Agreement shall be valid unless in writing and signed by the party against whom that waiver is sought to be enforced. No failure or delay on the part of any party in exercising any right, power or privilege hereunder and no course of dealing between or among any of the parties shall operate as a waiver of any right, power or privilege hereunder. No single or partial exercise of any right, power or privilege hereunder shall preclude any other or further exercise thereof or the exercise of any other right, power or privilege hereunder. No notice to or demand on any party in any case shall entitle such party to any other or further notice or demand in similar or other circumstances or constitute a waiver of the rights of any party to any other or further action in any circumstances without notice or demand.

9.6 ASSIGNMENTS. Neither this Agreement nor any right, interest or obligation hereunder may be assigned by either of the parties without the prior written consent of all parties hereto and any attempt to do so shall be null and void.

9.7 FORCE MAJEURE. A non-performing party shall not be liable in damages for any delay or default in its performance, if such delay or default is caused by conditions beyond its control, including acts of God, war or insurrection, strikes, fire, or floods; provided, however, that any party shall have the right to terminate this Agreement upon thirty (30) days prior written notice if the other party is unable to fulfill its obligations under this Agreement due to any of the above-mentioned causes and such inability continues for a period of six (6) months.

9.8 COUNTERPARTS. This Agreement may be executed in counterparts and by the different parties in separate counterparts, each of which when so executed shall be deemed an original and all of which taken together shall constitute one and the same agreement.

9.9 SEVERABILITY. Should any clause, sentence, paragraph, subsection, Section or Article of this Agreement be judicially declared to be invalid, unenforceable or void, such decision will not have the effect of invalidating or voiding the remainder of this Agreement, and the part or parts of this Agreement so held to be invalid, unenforceable or void will be deemed to have been stricken herefrom by the parties, and the remainder will have the same force and

effectiveness as if such stricken part or parts had never been included herein, provided however that in lieu of such invalid, unenforceable or void clause, sentence, paragraph, subsection, Section or Article, the parties working together in good faith are able to include as a negotiated part of this Agreement a valid and enforceable provision as similar in terms as may be possible which preserves the economic benefits to the parties.

9.10 APPLICABLE LAW. THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW JERSEY, WITHOUT GIVING EFFECT TO THE CONFLICT OF LAW PRINCIPLES THEREOF.

9.11 ARBITRATION. All disputes and disagreements between or among any or all of the parties hereto (each, a "Dispute") arising in connection with or related to this Agreement shall be resolved by binding arbitration administered by the American Arbitration Association (the "AAA") in New Jersey in accordance with, and in the following order of priority, (i) the terms of these arbitration provisions, (ii) the Commercial Arbitration Rules of the AAA, (iii) the Federal Arbitration Act (Title 9 of the United States Code) and (iv) to the extent the foregoing are inapplicable, unenforceable or invalid, the laws of the State of New Jersey. The validity and enforceability of these arbitration provisions shall be determined in accordance with this same order of priority. In the event of any inconsistency between these arbitration provisions and such rules and statutes, these arbitration provisions shall control. Each of the parties may bring any action in any court of competent jurisdiction to (A) compel arbitration of any Dispute, (B) obtain interim measures of protection pending arbitration of any Dispute and/or (C) enforce any decision of the arbitrators, including the final award. If either of the parties fails or refuses to submit to binding arbitration following a lawful demand by the other, the party so failing or refusing shall bear all costs and expenses incurred by the other in compelling arbitration of such Dispute.

9.12 EXPENSES. Each of the parties shall pay its own legal and accounting expenses incident to the negotiation and administration and performance of this Agreement and the transactions contemplated hereby.

9.13 CAPTIONS. The captions and headings contained in this Agreement shall not be considered or given any effect in construing the provisions hereof if any question of intent should arise.

9.14 CONSTRUCTION. No provision of this Agreement shall be interpreted or construed against any of the parties solely because that party or its legal representative drafted such provision.

9.15 ENTIRE AGREEMENT. This Agreement sets forth all of the promises, agreements, conditions, understandings, warranties and representations among the parties with respect to the transactions contemplated hereby, and supersedes all prior agreements, arrangements and

understandings among the parties, whether written, oral or otherwise. There are no promises, agreements, conditions, understandings, warranties or representations, oral or written, express or implied, among the parties concerning the subject matter hereof except as set forth herein.

IN WITNESS WHEREOF, each of the parties has caused this Agreement to be executed as of the Effective Date.

LEXICON GENETICS, INC.

By: /s/ Arthur T. Sands

Arthur T. Sands, M.D., Ph.D.
President

Address: 4000 Research Forest Drive
The Woodlands, Texas 77381
Attention: President
Facsimile No: 281-364-0155
Telephone No: 281-364-0100

MERCK GENOME RESEARCH INSTITUTE

By: /s/ C. Thomas Caskey

C. Thomas Caskey, M.D., F.A.C.P.
President

Address: 700 Sumneytown Pike
P.O. Box 4, WP26-207
West Point, Pennsylvania 19486
Attention: President
Facsimile No: 215-652-4538
Telephone No: 215-652-7399

EXHIBIT A
(PAYMENT SCHEDULE)

	Payment Due Date	Amount
1.	Within ***** of signing this Agreement	$4,000,000
2.	Within ***** of NFP's acceptance of the ***** of Mutant Mice delivered by Lexicon	$1,000,000
3.	Within ***** of NFP's acceptance of the ***** of Mutant Mice delivered by Lexicon	$1,000,000
4.	Within ***** of NFP's acceptance of the ***** of Mutant Mice delivered by Lexicon	$1,000,000
5.	Within ***** of NFP's acceptance of the ***** of Mutant Mice delivered by Lexicon	$1,000,000