

AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON APRIL 5, 2000

REGISTRATION NO. 333-96469

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

AMENDMENT NO. 3

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
(STATE OR OTHER JURISDICTION OF
INCORPORATION OR ORGANIZATION)

8731
(PRIMARY STANDARD INDUSTRIAL
CLASSIFICATION CODE NUMBER)

76-0474169
(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)

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80 PINE STREET
NEW YORK, NEW YORK 10005
(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 5, 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]

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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.

| | 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, 1999

| | ACTUAL | PRO FORMA (UNAUDITED) | PRO FORMA |
|---|----------|--------------------------|----------------------------|
| | | | AS ADJUSTED (UNAUDITED) |
| In thousands | | | |
| 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 analogous 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 erythropoietin, 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 |

* 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

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. Richard Fishel, Ph.D. | Thomas Jefferson University Thomas Jefferson University | Director, Kimmel Cancer Center 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 |
| William A. McMinn..... | 69 | Chairman of the Board of Directors |
| 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.

William A. McMinn has been the Chairman of our board of directors since July 1999 and a director since September 1997. 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 seven 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 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 | | LONG-TERM COMPENSATION AWARDS SECURITIES UNDERLYING OPTIONS |
|---|--------|---------------------|----------|--|
| | | SALARY | BONUS | |
| 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% | 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.

| NAME | NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT DECEMBER 31, 1999 | | VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT DECEMBER 31, 1999 | |
|------------------------------------|---|---------------|--|---------------|
| | 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 |

(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 | * | * |
| 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 (15 persons)(4)(5)(6)(7)(8)..... | 22,942,617 | 2,661,762 | 63.7% | 51.0% |

* 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.

| | NUMBER OF SHARES |
|---|------------------------------|
| UNDERWRITERS | |
| 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. The representatives may agree to allocate a number of shares to underwriters for sale to their on-line brokerage account holders. Internet distributions will be allocated by the underwriters that will make Internet distributions on the same basis as other allocations.

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

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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)

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LEXICON GENETICS INCORPORATED
BALANCE SHEETS

| | AS OF DECEMBER 31, | | PRO FORMA STOCKHOLDERS' EQUITY (DEFICIT) AT DECEMBER 31, 1999 |
|---|--------------------|--------------|---|
| | 1998 | 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) | |
| | ----- | ----- | |
| Other assets, net..... | 7,140,732 | 9,388,624 | |
| | 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.

LEXICON GENETICS INCORPORATED

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

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 | 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 |

LEXICON GENETICS INCORPORATED

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

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.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

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.

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

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) |

LEXICON GENETICS INCORPORATED

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

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"

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

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.

LEXICON GENETICS INCORPORATED

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

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

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

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

NOTES TO FINANCIAL STATEMENTS (CONTINUED)

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 rescission 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
 10.12** -- Master Loan and Security Agreement dated May 21, 1999, with FINOVA Capital Corporation
 10.13** -- Lease Agreement, dated September 22, 1995 between Lexicon and The Woodlands Corporation
 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

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* To be filed by amendment.

** Previously filed.

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

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 5, 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 ---- |
|---|--|---------------|
| * ----- Arthur T. Sands, M.D., Ph.D. | President, Chief Executive Officer and Director (principal executive officer) | April 5, 2000 |
| * ----- Julia P. Gregory | Executive Vice President and Chief Financial Officer (principal financial and accounting officer) | April 5, 2000 |
| /s/ JEFFREY L. WADE, J.D. ----- Jeffrey L. Wade, J.D. | Executive Vice President and General Counsel | April 5, 2000 |
| * ----- William A. McMinn | Chairman of the Board of Directors | April 5, 2000 |
| * ----- Stephen J. Banks | Director | April 5, 2000 |
| * ----- Gordon A. Cain | Director | April 5, 2000 |
| * ----- Patricia M. Cloherty | Director | April 5, 2000 |
| * ----- Paul Haycock, M.D. | Director | April 5, 2000 |
| * ----- Sam L. Barker, Ph.D. | Director | April 5, 2000 |

*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, and

March 17, 2000.

EXHIBIT INDEX

| EXHIBIT NO. ----- | DESCRIPTION ----- |
|----------------------|---|
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- - - - -
* To be filed by amendment.

** Previously filed.

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

LEXICON GENETICS INCORPORATED

[] Shares of Common Stock

Underwriting Agreement

[], 2000

J.P. Morgan Securities Inc.
Credit Suisse First Boston Corporation
CIBC World Markets Corp.
Dain Rauscher Incorporated
Punk, Ziegel & Company, L.P.

As Representatives of the several Underwriters
listed in Schedule I hereto

c/o J.P. Morgan Securities Inc.
60 Wall Street
New York, New York 10260

Ladies and Gentlemen:

Lexicon Genetics Incorporated., a Delaware corporation (the "Company"), proposes to sell to the several Underwriters listed in Schedule I hereto (the "Underwriters"), for whom you are acting as representatives (the "Representatives"), an aggregate of [] shares (the "Underwritten Shares") of Common Stock, par value \$0.001 per share, of the Company (the "Common Stock"). In addition, for the sole purpose of covering over-allotments in connection with the sale of the Underwritten Shares, the Company proposes to issue and sell to the Underwriters, at the option of the Underwriters, up to an additional [] shares (the "Option Shares") of Common Stock. The Underwritten Shares and the Option Shares are herein referred to as the "Shares."

As part of the offering contemplated by this Agreement, J.P. Morgan Securities Inc. and Credit Suisse First Boston Corporation (the "Designated Underwriters") have agreed to reserve out of the Underwritten Shares purchased by them under this Agreement, up to five percent or 500,000 shares, for sale to the Company's directors, officers, employees and other parties associated with the Company (collectively, "Participants"), as set forth in the Prospectus (as defined herein) under the heading "Underwriting" (the "Directed Share Program"). The Underwritten Shares to be sold by the Designated Underwriters pursuant to the Directed Share Program (the "Directed Shares") will be sold by the Designated Underwriters pursuant

to this Agreement at the public offering price. Any Directed Shares not orally confirmed for purchase by a Participant by the end of the business day on which this Agreement is executed will be offered to the public by the Underwriters as set forth in the Prospectus.

The Company has prepared and filed with the Securities and Exchange Commission (the "Commission") in accordance with the provisions of the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder (collectively, the "Securities Act"), a registration statement, including a prospectus, relating to the Shares. The registration statement as amended at the time when it became or shall become effective, including information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rule 430A under the Securities Act, is referred to in this Agreement as the "Registration Statement," and the prospectus in the form first used to confirm sales of Shares is referred to in this Agreement as the "Prospectus." If the Company has filed an abbreviated registration statement pursuant to Rule 462(b) under the Securities Act (the "Rule 462 Registration Statement"), then any reference herein to the term "Registration Statement" shall be deemed to include such Rule 462 Registration Statement.

1. The Company agrees to issue and sell the Underwritten Shares to the several Underwriters as hereinafter provided, and each Underwriter, upon the basis of the representations and warranties herein contained, but subject to the conditions hereinafter stated, agrees to purchase, severally and not jointly, from the Company at a purchase price per share of \$[] (the "Purchase Price") the number of Underwritten Shares to be purchased by such Underwriter as set forth opposite the name of such Underwriter in Schedule I hereto.

In addition, the Company agrees to sell the Option Shares to the several Underwriters as hereinafter provided, and each Underwriter, upon the basis of the representations and warranties herein contained, but subject to the conditions hereinafter stated, shall have the option to purchase, severally and not jointly, from the Company at the Purchase Price that portion of the number of Option Shares as to which such election shall have been exercised (to be adjusted by you so as to eliminate fractional shares) determined by multiplying such number of Option Shares by a fraction, the numerator of which is the maximum number of Underwritten Shares which such Underwriter is entitled to purchase as set forth opposite the name of such Underwriter in Schedule I hereto and the denominator of which is the maximum number of Underwritten Shares which all of the Underwriters are entitled to purchase hereunder, for the sole purpose of covering over-allotments (if any) in the sale of Underwritten Shares by the several Underwriters.

The Underwriters may exercise the option to purchase the Option Shares at any time (but not more than once) on or before the thirtieth day following the date of this Agreement, by written notice from the Representatives to the Company. Such notice shall set forth the aggregate number of Option Shares as to which the option is being exercised and the date

and time when the Option Shares are to be delivered and paid for, which may be the same date and time as the Closing Date (as hereinafter defined) but shall not be earlier than the Closing Date nor later than the tenth full Business Day (as hereinafter defined) after the date of such notice (unless such time and date are postponed in accordance with the provisions of Section 9 hereof). Any such notice shall be given at least two Business Days prior to the date and time of delivery specified therein.

2. The Company understands that the Underwriters intend (i) to make a public offering of the Shares as soon after (A) the Registration Statement has become effective and (B) the parties hereto have executed and delivered this Agreement, as in the judgment of the Representatives is advisable and (ii) initially to offer the Shares upon the terms set forth in the Prospectus.

3. Payment for the Shares shall be made by wire transfer in immediately available funds to the account specified by the Company to the Representatives, in the case of the Underwritten Shares, on [], 2000, or at such other time on the same or such other date, not later than the fifth Business Day thereafter, as the Representatives and the Company may agree upon in writing, or, in the case of the Option Shares, on the date and time specified by the Representatives in the written notice of the Underwriters' election to purchase such Option Shares. The time and date of such payment for the Underwritten Shares is referred to herein as the "Closing Date," and the time and date for such payment for the Option Shares, if other than the Closing Date, are herein referred to as the "Additional Closing Date." As used herein, the term "Business Day" means any day other than a day on which banks are permitted or required to be closed in New York City.

Payment for the Shares to be purchased on the Closing Date or the Additional Closing Date, as the case may be, shall be made against delivery to the Representatives for the respective accounts of the several Underwriters of the Shares to be purchased on such date registered in such names and in such denominations as the Representatives shall request in writing not later than two full Business Days prior to the Closing Date or the Additional Closing Date, as the case may be, with any transfer taxes payable in connection with the transfer to the Underwriters of the Shares duly paid by the Company. The certificates for the Shares will be made available for inspection and packaging by the Representatives at the office of J.P. Morgan Securities Inc. set forth above not later than 1:00 P.M., New York City time, on the Business Day prior to the Closing Date or the Additional Closing Date, as the case may be.

4. The Company represents and warrants to each Underwriter that:

(a) no order preventing or suspending the use of any preliminary prospectus has been issued by the Commission, and each preliminary prospectus filed as part of the Registration Statement as originally filed or as part of any amendment thereto, or

filed pursuant to Rule 424 under the Securities Act, complied when so filed in all material respects with the Securities Act, and did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the foregoing representations and warranties shall not apply to any statements or omissions made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use therein;

(b) no stop order suspending the effectiveness of the Registration Statement has been issued and no proceeding for that purpose has been instituted or, to the knowledge of the Company, threatened by the Commission; the Registration Statement and Prospectus (as amended or supplemented if the Company shall have furnished any amendments or supplements thereto) comply, or will comply, as the case may be, in all material respects with the Securities Act and do not and will not, as of the applicable effective date as to the Registration Statement and any amendment thereto and as of the date of the Prospectus and any amendment or supplement thereto, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and the Prospectus, as amended or supplemented, if applicable, at the Closing Date or Additional Closing Date, as the case may be, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, except that the foregoing representations and warranties shall not apply to any statements or omissions in the Registration Statement or the Prospectus made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use therein;

(c) the financial statements, and the related notes thereto, included in the Registration Statement and the Prospectus present fairly the financial position of the Company as of the dates indicated and the results of its operations and changes in its cash flows for the periods specified; said financial statements have been prepared in conformity with generally accepted accounting principles applied on a consistent basis, and the supporting schedules included in the Registration Statement present fairly the information required to be stated therein; and the pro forma financial information, and the related notes thereto, included in the Registration Statement and the Prospectus has been prepared in accordance with the applicable requirements of the Securities Act and the Securities Exchange Act of 1934 (the "Exchange Act"), as applicable, and is based upon good faith estimates and assumptions believed by the Company to be reasonable;

(d) since the respective dates as of which information is given in the Registration Statement and the Prospectus, there has not been any change in the capital stock or long-term debt of the Company, or any material adverse change, or any development involving a prospective material adverse change, in or affecting the general affairs, business, prospects, management, financial position, stockholders' equity or results of operations of the Company, (a "Material Adverse Change"), otherwise than as set forth or contemplated in the Prospectus; and except as set forth or contemplated in the Prospectus, the Company has not entered into any transaction or agreement (whether or not in the ordinary course of business) material to the Company;

(e) the Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware, with power and authority (corporate and other) to own its properties and conduct its business as described in the Prospectus, and has been duly qualified as a foreign corporation for the transaction of business and is in good standing under the laws of each other jurisdiction in which it owns or leases properties, or conducts any business, so as to require such qualification, other than where the failure to be so qualified or in good standing would not have a material adverse effect on the general affairs, business, prospects, management, financial position, stockholders' equity or results of operations of the Company, (a "Material Adverse Effect");

(f) the Company has no subsidiaries;

(g) this Agreement has been duly authorized, executed and delivered by the Company;

(h) the Company has an authorized capitalization as set forth in the Prospectus and such authorized capital stock conforms as to legal matters to the description thereof set forth in the Prospectus, and all of the outstanding shares of capital stock of the Company have been duly authorized and validly issued, are fully paid and non-assessable and are not subject to any pre-emptive or similar rights; and, except as described in or expressly contemplated by the Prospectus, there are no outstanding rights (including, without limitation, pre-emptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of capital stock or other equity interest in the Company, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any capital stock of the Company, any such convertible or exchangeable securities or any such rights, warrants or options;

(i) the Shares have been duly authorized, and, when issued and delivered to and paid for by the Underwriters in accordance with the terms of this Agreement, will be duly issued and will be fully paid and non-assessable and will conform to the

descriptions thereof in the Prospectus; and the issuance of the Shares is not subject to any preemptive or similar rights;

(j) the Company is not, nor with the giving of notice or lapse of time or both would the Company be, in violation of or in default under its certificate of incorporation or by-laws or any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which it or any of its properties is bound, except for violations and defaults which would not, individually or in the aggregate, have a Material Adverse Effect; the performance by the Company of its obligations under this Agreement and the consummation of the transactions contemplated herein and in the Prospectus will not conflict with or result in a breach of any of the terms or provisions of, or constitute a default under, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company is a party or by which the Company is bound or to which any of the property or assets of the Company are subject, in each case except for such breaches or conflicts as would not, individually or in the aggregate, have a Material Adverse Effect, nor will any such action result in any violation of the provisions of the certificate of incorporation or the by-laws of the Company or any applicable law or statute or any order, rule or regulation of any court or governmental agency or body having jurisdiction over the Company or any of its properties; and no consent, approval, authorization, order, license, registration or qualification of or with any such court or governmental agency or body is required for the consummation by the Company of the transactions contemplated by this Agreement and the Prospectus, except such consents, approvals, authorizations, orders, licenses, registrations or qualifications as have been obtained under the Securities Act and as may be required under state securities or blue sky laws in connection with the purchase and distribution of the Shares by the Underwriters;

(k) other than as set forth in the Prospectus, there are no legal or governmental investigations, actions, suits or proceedings pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its properties or to which the Company is or may be a party or to which any property of the Company is or may be the subject which, if determined adversely to the Company, could, individually or in the aggregate, have, or reasonably be expected to have, a Material Adverse Effect, and, to the Company's knowledge, no such proceedings are threatened or contemplated by governmental authorities or threatened by others; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement or Prospectus or to be filed as exhibits to the Registration Statement that are not described or filed as required;

(l) the Company has good and marketable title to all items of real property and good and marketable title to all personal property owned by it, in each case free and

clear of all liens, encumbrances and defects except such as are described or referred to in the Prospectus or such as do not materially interfere with the use made or proposed to be made of such property by the Company; and any real property and buildings held under lease by the Company are held by them under valid, existing and enforceable leases with such exceptions as are not material and do not materially interfere with the use made or proposed to be made of such property and buildings by the Company;

(m) no relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company, on the other hand, which is required by the Securities Act to be described in the Registration Statement and the Prospectus which is not so described;

(n) no person has the right to require the Company to register any securities for offering and sale under the Securities Act by reason of the filing of the Registration Statement with the Commission or, the sale of the Shares pursuant hereto, except for rights which have been waived;

(o) the Company is not, and after giving effect to the offering and sale of the Shares, will not be an "investment company" as such term is defined in the Investment Company Act of 1940, as amended (the "Investment Company Act");

(p) Arthur Andersen LLP ("Arthur Andersen"), who have certified certain financial statements of the Company, are independent public accountants as required by the Securities Act;

(q) the Company has filed all federal, state, local and foreign tax returns which have been required to be filed and have paid all taxes shown thereon and all assessments received by it to the extent that such taxes have become due and are not being contested in good faith; and, except as disclosed in the Registration Statement and the Prospectus, no tax deficiency has been determined adversely to the Company which has had, nor does the Company have any knowledge of any tax deficiency, which if determined adversely to the Company or any subsidiary might have a Material Adverse Effect;

(r) the Company has not taken nor will it take, directly or indirectly, any action designed to, or that might be reasonably expected to, cause or result in stabilization or manipulation of the price of the Common Stock;

(s) the statistical and market-related data included in the Registration Statement and the Prospectus are based on or derived from sources which are believed by the Company to be reliable;

(t) except as would not, individually or in the aggregate, have a Material Adverse Effect, the Company owns, possesses or has obtained all licenses, permits, certificates, consents, orders, approvals and other authorizations from, and has made all declarations and filings with, all federal, state, local and other governmental authorities (including foreign regulatory agencies), all self-regulatory organizations and all courts and other tribunals, domestic or foreign, necessary to own or lease, as the case may be, and to operate its properties and to carry on its business as conducted as of the date hereof, and the Company has not received any actual notice of any proceeding relating to revocation or modification of any such license, permit, certificate, consent, order, approval or other authorization, except as described in the Registration Statement and the Prospectus, and the Company is in compliance with all laws and regulations relating to the conduct of its business as conducted as of the date hereof;

(u) the Company owns, is licensed to use or otherwise possesses adequate rights to use the patents, patent rights, licenses, inventions, trademarks, service marks, trade names, copyrights and know-how, including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems, processes or procedures (collectively, the "Intellectual Property"), reasonably necessary to carry on the business conducted by it, except to the extent that the failure to own, be licensed to use or otherwise possess adequate rights to use such Intellectual Property would not, individually or in the aggregate, be reasonably expected to have a Material Adverse Effect; except as set forth in the Prospectus, the Company has not received any notice of infringement of or conflict with, and the Company has no knowledge of any infringement of or conflict with, asserted rights of others with respect to its Intellectual Property which could reasonably be expected to result in a Material Adverse Effect; except as set forth in the Prospectus, the discoveries, inventions, products or processes of the Company referred to in the Registration Statement and the Prospectus do not, to the knowledge of the Company, infringe or conflict with any right or patent of any third party, or any discovery, invention, product or process which is the subject of a patent application filed by any third party which patent application has been published or is otherwise known to the Company which could reasonably be expected to result in a Material Adverse Effect; except as set forth in the Prospectus, the Company is not obligated to pay a royalty, grant a license or provide other consideration to any third party in connection with its patents, patent rights, licenses, inventions, trademarks, service marks, trade names, copyrights and know-how which could reasonably be expected to result in a Material Adverse Effect; and no third party, including any academic or governmental organization, possesses rights to the Intellectual Property which, if exercised, could reasonably be expected to have a Material Adverse Effect;

(v) there are no existing or, to the knowledge of the Company, threatened labor disputes with the employees of the Company which are likely to have a Material Adverse Effect;

(w) the Company carries, or is covered by, insurance in such amounts and covering such risks as is customary for companies engaged in similar businesses in similar industries;

(x) the Company (i) is in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (collectively, "Environmental Laws"), (ii) has received all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its businesses and (iii) is in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect;

(y) each employee benefit plan within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), that is maintained, administered or contributed to by the Company or any of its affiliates for employees or former employees of the Company and its affiliates has been maintained in material compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Internal Revenue Code of 1986, as amended ("Code"); no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any such plan excluding transactions effected pursuant to a statutory or administrative exemption; for each such plan which is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no "accumulated funding deficiency," as defined in Section 412 of the Code, has been incurred, whether or not waived, and the fair market value of the assets of each such plan that is subject to Title IV of ERISA (excluding for these purposes accrued but unpaid contributions) exceed the present value of all benefits accrued under such plan determined using reasonable actuarial assumptions;

(z) (i) the Registration Statement, the Prospectus and any preliminary prospectus comply, and any further amendments or supplements thereto will comply, with any applicable laws or regulations of foreign jurisdictions in which the Prospectus or any preliminary prospectus, as amended or supplemented, if applicable, are distributed in connection with the Directed Share Program, and (ii) no authorization, approval, consent, license, order, registration or qualification of or with any government,

governmental instrumentality or court, other than such as have been obtained, is necessary under the securities laws and regulations of foreign jurisdictions in which the Directed Shares are offered outside the United States; and

(aa) the Company has not offered, or caused the Underwriters to offer, any Shares to any person pursuant to the Directed Share Program with the specific intent to unlawfully influence (i) a customer or supplier of the Company to alter the customer's or supplier's level or type of business with the Company or (ii) a trade journalist or publication to write or publish favorable information about the Company or its products.

5. The Company covenants and agrees with each of the several Underwriters as follows:

(a) if the Registration Statement is not already effective, to use its best efforts to cause the Registration Statement to become effective at the earliest possible time and, if required, to file the final Prospectus with the Commission within the time periods specified by Rule 424(b) and Rule 430A under the Securities Act and to furnish copies of the Prospectus to the Underwriters in New York City prior to 2:00 p.m., New York City time, on the Business Day next succeeding the date of this Agreement in such quantities as the Representatives may reasonably request;

(b) to deliver, at the expense of the Company, to the Representatives five signed copies of the Registration Statement (as originally filed) and each amendment thereto, in each case including exhibits, and to each other Underwriter a conformed copy of the Registration Statement (as originally filed) and each amendment thereto, in each case without exhibits and, during the period mentioned in paragraph (e) below, to each of the Underwriters as many copies of the Prospectus (including all amendments and supplements thereto) as the Representatives may reasonably request;

(c) before filing any amendment or supplement to the Registration Statement or the Prospectus, whether before or after the time the Registration Statement becomes effective, to furnish to the Representatives a copy of the proposed amendment or supplement for review and not to file any such proposed amendment or supplement to which the Representatives reasonably object unless advised by counsel in writing that the filing of such amendment or supplement is required by law;

(d) to advise the Representatives promptly, and to confirm such advice in writing, (i) when the Registration Statement has become effective, (ii) when any amendment to the Registration Statement has been filed or becomes effective, (iii) when any supplement to the Prospectus or any amended Prospectus has been filed and to furnish the Representatives with copies thereof, (iv) of any request by the Commission

for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or for any additional information, (v) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or of any order preventing or suspending the use of any preliminary prospectus or the Prospectus or the initiation or threatening of any proceeding for that purpose, (vi) of the occurrence of any event, during the period mentioned in paragraph (e) below, as a result of which the Prospectus as then amended or supplemented would include an untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances when the Prospectus is delivered to a purchaser, not misleading, and (vii) of the receipt by the Company of any notification with respect to any suspension of the qualification of the Shares for offer and sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; and to use its best efforts to prevent the issuance of any such stop order, or of any order preventing or suspending the use of any preliminary prospectus or the Prospectus, or of any order suspending any such qualification of the Shares, or notification of any such order thereof, and, if issued, to obtain as soon as possible the withdrawal thereof;

(e) if, during such period of time after the first date of the public offering of the Shares as in the opinion of counsel for the Underwriters a prospectus relating to the Shares is required by law to be delivered in connection with sales by the Underwriters or any dealer, any event shall occur as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein, in light of the circumstances when the Prospectus is delivered to a purchaser, not misleading, or if it is necessary to amend or supplement the Prospectus to comply with law, forthwith to prepare and furnish, at the expense of the Company, to the Underwriters and to the dealers (whose names and addresses the Representatives will furnish to the Company) to which Shares may have been sold by the Representatives on behalf of the Underwriters and to any other dealers upon request, such amendments or supplements to the Prospectus as may be necessary so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances when the Prospectus is delivered to a purchaser, be misleading or so that the Prospectus will comply with law;

(f) to endeavor to qualify the Shares for offer and sale under the securities or blue sky laws of such jurisdictions as the Representatives shall reasonably request and to continue such qualification in effect so long as reasonably required for distribution of the Shares; provided that the Company shall not be required to file a general consent to service of process in any jurisdiction;

(g) to make generally available to its security holders and to the Representatives as soon as practicable an earnings statement covering a period of at least twelve

months beginning with the first fiscal quarter of the Company occurring after the effective date of the Registration Statement, which shall satisfy the provisions of Section 11(a) of the Securities Act and Rule 158 of the Commission promulgated thereunder;

(h) so long as the Shares are outstanding, to furnish or make available to the Representatives copies of all reports or other communications (financial or other) furnished to holders of the Shares, and copies of any reports and financial statements furnished to or filed with the Commission or any national securities exchange;

(i) for a period of 180 days after the date of the initial public offering of the Shares not to, (i) directly or indirectly, offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise transfer or dispose of any shares of Common Stock or any securities of the Company which are substantially similar to the Common Stock, including, but not limited to, any securities convertible into or exercisable or exchangeable for, or that represent the right to receive, Common Stock or any such substantially similar securities (including, but not limited to, any securities which may be issued upon exercise of a stock option or warrant) or (ii) enter into any swap, option, future, forward or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the Common Stock or any such substantially similar securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise without the prior written consent of J.P. Morgan Securities Inc., other than any options granted or shares of Common Stock of the Company issued upon the exercise of options granted or to be granted under the Company's employee stock option plans existing on the date of the Prospectus or shares of Common Stock issued upon exercise of warrants existing on the date of the Prospectus;

(j) to use the net proceeds received by the Company from the sale of the Shares pursuant to this agreement in the manner specified in the Prospectus under the caption "Use of Proceeds";

(k) whether or not the transactions contemplated in this Agreement are consummated or this Agreement is terminated, to pay or cause to be paid all costs and expenses incident to the performance of its obligations hereunder, including without limiting the generality of the foregoing, all costs and expenses (i) incident to the preparation, registration, transfer, execution and delivery of the Shares, (ii) incident to the preparation, printing and filing under the Securities Act of the Registration Statement, the Prospectus and any preliminary prospectus, including in each case all exhibits,

amendments and supplements thereto, (iii) incurred in connection with the listing of the Shares on the Nasdaq National Market, (iv) related to the filing with, and clearance of the offering by, the National Association of Securities Dealers, Inc., (v) in connection with the printing and delivery of this Agreement, any blue sky memoranda and the furnishing to the Underwriters and dealers of copies of the Registration Statement and the Prospectus, including mailing and shipping, as herein provided, (vi) any expenses incurred by the Company in connection with a "road show" presentation to potential investors, (vii) the cost of preparing stock certificates, (viii) the cost and charges of the Company's transfer agent and registrar and (ix) costs and expenses (including all filing fees) incurred in connection with the registration or qualification of the Shares under the laws of such jurisdictions as the Representatives may designate (including reasonable fees of counsel for the Underwriters and its disbursements in connection therewith). It is understood, however, that, except as otherwise agreed by the Company and the Underwriters and except as provided in this Section 5, Section 7 and Section 10 hereof, the Underwriters will pay all of their own costs and expenses, including the fees of their counsel;

(l) in connection with the Directed Share Program, to ensure that the Directed Shares will be restricted to the extent required by the National Association of Securities Dealers, Inc. (the "NASD") or the NASD rules from sale, transfer, assignment, pledge or hypothecation for a period of three months following the date of the effectiveness of the Registration Statement. The Designated Underwriters will notify the Company as to which Participants will need to be so restricted. The Company will direct the transfer agent to place stop transfer restrictions upon such securities for such period of time; and

(m) to pay all reasonable fees and disbursements of counsel incurred by the Underwriters in connection with the Directed Shares Program and stamp duties, similar taxes or duties or other taxes, if any, incurred by the Underwriters in connection with the Directed Share Program.

Furthermore, the Company covenants with the Underwriters that the Company will comply with all applicable securities and other applicable laws, rules and regulations in each foreign jurisdiction in which the Directed Shares are offered in connection with the Directed Share Program.

6. The several obligations of the Underwriters hereunder to purchase the Shares on the Closing Date or the Additional Closing Date, as the case may be, are subject to the performance by the Company of its obligations hereunder and to the following additional conditions:

(a) the Registration Statement shall have become effective (or if a post-effective amendment is required to be filed under the Securities Act, such post-effective amendment shall have become effective) not later than 5:00 P.M., New York City time, on the date hereof; and no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment shall be in effect, and no proceedings for such purpose shall be pending before or threatened by the Commission; the Prospectus shall have been filed with the Commission pursuant to Rule 424(b) within the applicable time period prescribed for such filing by the rules and regulations under the Securities Act; and all requests for additional information shall have been complied with to the satisfaction of the Representatives;

(b) the representations and warranties of the Company contained herein are true and correct on and as of the Closing Date or the Additional Closing Date, as the case may be, as if made on the Closing Date or the Additional Closing Date, as the case may be, and the Company shall have complied with all agreements and all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date or the Additional Closing Date, as the case may be;

(c) since the respective dates as of which information is given in the Prospectus, there shall not have been any material change in the capital stock or long-term debt of the Company, or any Material Adverse Change, otherwise than as set forth or contemplated in the Prospectus, the effect of which in the judgment of the Representatives makes it impracticable or inadvisable to proceed with the public offering or the delivery of the Shares on the Closing Date or the Additional Closing Date, as the case may be, on the terms and in the manner contemplated in the Prospectus; and the Company has not sustained since the date of the latest audited financial statements included in the Prospectus any material loss or interference with its business from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor dispute or court or governmental action, order or decree, otherwise than as set forth or contemplated in the Prospectus;

(d) the Representatives shall have received on and as of the Closing Date or the Additional Closing Date, as the case may be, (1) a certificate of the Chief Executive Officer and Chief Financial Officer of the Company, satisfactory to the Representatives, to the effect set forth in subsections (a) through (d) (with respect to the respective representations, warranties, agreements and conditions of the Company) of this Section 6 and to the further effect that there has not occurred any Material Adverse Change from that set forth or contemplated in the Registration Statement;

(e) Andrews & Kurth L.L.P., counsel for the Company, shall have furnished to the Representatives their written opinion, dated the Closing Date or the Additional

Closing Date, as the case may be, in form and substance satisfactory to the Representatives, to the effect that:

(i) the Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware, with corporate power and authority to own its properties and conduct its business as described in the Prospectus;

(ii) the Company has been duly qualified as a foreign corporation for the transaction of business and is in good standing under the laws of each jurisdiction in which it owns or leases properties, or conducts any business, so as to require such qualification, other than where the failure to be so qualified or in good standing would not have a Material Adverse Effect;

(iii) other than as set forth or contemplated in the Prospectus and to such counsel's knowledge, there are no legal or governmental investigations, actions, suits or proceedings pending or threatened against or affecting the Company or any of its properties or to which the Company is or may be a party or to which any property of the Company is or may be the subject which, if determined adversely to the Company, could, individually or in the aggregate, reasonably be expected to have, a Material Adverse Effect, and, to such counsel's knowledge, no such proceedings are threatened or contemplated by governmental authorities or threatened by others; and such counsel does not know of any statutes, regulations, contracts or other documents that are required to be described in the Registration Statement or Prospectus or to be filed as exhibits to the Registration Statement that are not described or filed as required;

(iv) this Agreement has been duly authorized, executed and delivered by the Company;

(v) the authorized capital stock of the Company conforms as to legal matters to the description thereof contained in the Prospectus;

(vi) all of the outstanding shares of capital stock of the Company have been duly and validly authorized and issued, are fully paid and non-assessable and are free of statutory and, to such counsel's knowledge, contractual pre-emptive rights; and, except as described in or expressly contemplated by the Prospectus and to such counsel's knowledge, there are no outstanding rights (including, without limitation, pre-emptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of capital

stock or other equity interest in the Company, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any capital stock of the Company, any such convertible or exchangeable securities or any such rights, warrants or options;

(vii) the Shares to be issued and sold by the Company hereunder have been duly authorized, and when delivered to and paid for by the Underwriters in accordance with the terms of this Agreement, will be validly issued, fully paid and non-assessable and the issuance of the Shares is not subject to any pre-emptive of similar rights;

(viii) the statements in the Prospectus under "Description of Capital Stock" and "Material U.S. Federal Tax Considerations for Non-U.S. Holders of Common Stock" and in the Registration Statement in Item 15, insofar as such statements constitute a summary of the legal matters or documents referred to therein, fairly summarize in all material respects such matters or documents;

(ix) the Registration Statement and the Prospectus and any supplement or amendment thereto (other than any financial statements and related schedules and other financial or statistical information therein as to which no belief is expressed) comply as to form in all material respects with the Securities Act;

(x) such counsel shall state that no facts have come to their attention to cause them to believe that (A) the Registration Statement and the prospectus included therein (other than any financial statements and related schedules and other financial or statistical information therein as to which no belief is expressed) at its effective date contained an untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements contained therein not misleading or (B) the Prospectus (other than any financial statements and related schedules and other financial or statistical information therein as to which no belief is expressed), as of its date and as of the Closing Date or the Additional Closing Date, as the case may be, contained or contains an untrue statement of a material fact or omitted or omits to state a material fact necessary to make the statements contained therein, in the light of the circumstances under which they were made, not misleading;

(xi) no consent, approval, authorization, order, license, registration or qualification with any Texas, Delaware or U.S. federal governmental body or agency is required for the consummation by the Company of the transactions contemplated by this Agreement and the Prospectus, except such consents, approvals, authorizations, orders, licenses, registrations or qualifications as have

been obtained under the Securities Act and as may be required under state securities or blue sky laws in connection with the purchase and distribution of the Shares by the Underwriters;

(xii) to such counsel's knowledge, no person has the right to require the Company to register any securities for offering and sale under the Securities Act by reason of the filing of the Registration Statement with the Commission or, the sale of the Shares pursuant hereto, except for rights which have been waived;

(xiii) the Company is not and, after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Prospectus, will not be required to register as an "investment company" as such term is defined in the Investment Company Act; and

(xiv) the execution, delivery and performance by the Company of its obligations under this Agreement and the consummation of the transactions contemplated herein will not conflict with or result in a breach of any of the terms or provisions of, or constitute a default under, any contract, agreement or instrument that is an exhibit to the Registration Statement, nor will any such action result in any violation of the provisions of the certificate of incorporation or the by-laws of the Company or (a) any applicable Texas, Delaware or U.S. federal law or statute or (b) to such counsel's knowledge, any order of any court or governmental agency or body having jurisdiction over the Company or any of its properties, or any rule or regulation of any Texas, Delaware or U.S. federal court or governmental agency or body having jurisdiction over the Company or any of its properties, except for such conflicts, breaches and defaults which would not, individually or in the aggregate, have a Material Adverse Effect, except that such counsel expresses no opinion with respect to state securities or blue sky laws or with respect to the rights to indemnity and contribution under this Agreement.

In rendering such opinions, such counsel may rely (A) as to matters involving the application of laws other than the laws of the United States and the State of Texas and the General Corporation Law of the State of Delaware, to the extent such counsel deems proper and to the extent specified in such opinion, if at all, upon an opinion or opinions (in form and substance reasonably satisfactory to the Underwriters' counsel) of other counsel reasonably acceptable to the Underwriters' counsel, familiar with the applicable laws; and (B) as to matters of fact, to the extent such counsel deems proper, on certificates of responsible officers of the Company and certificates or other written statements of officials of jurisdictions having custody of documents respecting the

corporate existence or good standing of the Company. The opinion of such counsel for the Company shall state that the opinion of any such other counsel upon which they relied is in form satisfactory to such counsel and, in such counsel's opinion, the Underwriters and they are justified in relying thereon. With respect to the matters to be covered in subparagraph (xi) above, counsel may state their opinion and belief is based upon their participation in the preparation of the Registration Statement and the Prospectus and any amendment or supplement thereto and review and discussion of the contents thereof but is without independent check or verification except as specified.

The opinion of Andrews & Kurth L.L.P. described above shall be rendered to the Underwriters at the request of the Company and shall so state therein;

(f) [], patent counsel for the Company, shall have furnished to the Representatives their written opinion, dated the Closing Date or the Additional Closing Date, as the case may be, in form and substance satisfactory to the Representatives, to the effect that:

(i) the Company owns, is licensed to use or otherwise possesses or has adequate rights to use the Intellectual Property reasonably necessary to carry on the business conducted by it as of the date hereof, except to the extent that the failure to own, be licensed to use or otherwise possess or have adequate rights to use such Intellectual Property would not, individually or in the aggregate, have a Material Adverse Effect;

(ii) the statements in the Registration Statement and the Prospectus under (A) "Risk Factors--Our ability to patent our discoveries is uncertain because patent laws and their interpretation are highly uncertain and subject to change," "--Our patent applications may not result in enforceable rights," "--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," "--If our potential products conflict with patents that competitors, universities or others have obtained, then we may be unable to commercialize those products," "--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," "--Our rights to the use of technologies licensed by third parties are not within our control," "--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," "Business--Government

Regulation," insofar as such statements concern descriptions of legal matters or documents, in each case, fairly summarize in all material respects such matters or documents;

(iii) other than as set forth or contemplated in the Prospectus, to the knowledge of such counsel, the Company has not received any notice of infringement of or conflict with, and such counsel has no knowledge of any infringement of or conflict with, asserted rights of others with respect to the Company's Intellectual Property which could reasonably be expected to result in a Material Adverse Effect;

(iv) other than as set forth or contemplated in the Prospectus, the discoveries, inventions, products or processes of the Company referred to in the Registration Statement and the Prospectus do not, to the knowledge of such counsel, infringe or conflict with any rights of any third party, or any discovery, invention, product or process which is the subject of a patent application filed by any third party which patent application has not been published or is otherwise known to the Company except to the extent that any such infringement, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect; and

(v) other than as set forth or contemplated in the Prospectus, no third party, including any academic or governmental organization, possesses rights to the Company's patents, patent applications or patent rights which, if exercised, could reasonably be expected to have a Material Adverse Effect;

In rendering such opinions, such counsel may rely as to matters of fact, to the extent such counsel deems proper, on certificates of responsible officers of the Company.

The opinion of [], described above shall be rendered to the Underwriters at the request of the Company and shall so state therein;

(g) on the date hereof and the effective date of the most recently filed post-effective amendment filed on or subsequent to the date hereof to the Registration Statement and also on the Closing Date or Additional Closing Date, as the case may be, Arthur Andersen shall have furnished to you letters, dated the respective dates of delivery thereof, in form and substance satisfactory to you, containing statements and information of the type customarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement and the Prospectus;

(h) the Representatives shall have received on and as of the Closing Date or Additional Closing Date, as the case may be, an opinion of Cahill Gordon & Reindel, counsel to the Underwriters, with respect to the Registration Statement, the Prospectus and other related matters as the Representatives may reasonably request, and such counsel shall have received such papers and information as they may reasonably request to enable them to pass upon such matters;

(i) the Shares to be delivered on the Closing Date or Additional Closing Date, as the case may be, shall have been approved for quotation on the Nasdaq National Market, subject to official notice of issuance;

(j) on or prior to the Closing Date or Additional Closing Date, as the case may be, the Company shall have furnished to the Representatives such further certificates and documents as the Representatives shall reasonably request; and

(k) the "lock-up" agreements, each substantially in the form of Exhibit A hereto, among you and the directors, executive officers and certain shareholders of the Company relating to sales and certain other dispositions of shares of Common Stock or certain other securities, delivered to you on or before the date hereof, shall be in full force and effect on the Closing Date or Additional Closing Date, as the case may be.

7. The Company agrees to indemnify and hold harmless each Underwriter, each affiliate of any Underwriter which assists such Underwriter in the distribution of Shares and each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any and all losses, claims, damages and liabilities (including, without limitation, the legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted) caused by any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or the Prospectus (as amended or supplemented if the Company shall have furnished any amendments or supplements thereto) or any preliminary prospectus, or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such losses, claims, damages or liabilities are caused by any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with information relating to any Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use therein; provided, however, that the foregoing indemnity agreement with respect to any preliminary prospectus shall not inure to the benefit of any Underwriter (or affiliate of such Underwriter which assists such Underwriter in the distribution of Shares) from whom the persons asserting any such losses, claims, damages, or liabilities purchased Shares, or any controlling such Underwriter, if a copy of the Prospectus (as then amended or supplemented if the Company shall have furnished any amendments or

supplements thereto) was not sent or given by or on behalf of such Underwriter to such person, if required by law so to have been delivered, at or prior to the written confirmation of the sale of the Shares to such person, and if the Prospectus (as so amended or supplemented) would have cured the defect giving rise to such loss, claim, damage or liability, unless such failure to send or give a copy of the Prospectus is the result of noncompliance by the Company with Section 5(a) or (b) hereof.

The Company agrees to indemnify and hold harmless each of the Designated Underwriters and each person, if any, who controls either Designated Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act (the "Designated Entities"), from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) (i) caused by any untrue statement or alleged untrue statement of a material fact contained in any material prepared by or with the consent of the Company for distribution to Participants in connection with the Directed Share Program or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading; (ii) caused by the failure of any Participant to pay for and accept delivery of Directed Shares that the Participant agreed to purchase; or (iii) related to, arising out of, or in connection with the Directed Share Program, other than losses, claims, damages or liabilities (or expenses relating thereto) that are finally judicially determined to have resulted from the bad faith or gross negligence of the Designated Entities.

Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who sign the Registration Statement and each person who controls the Company within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to each Underwriter, but only with reference to information relating to such Underwriter furnished to the Company in writing by such Underwriter through the Representatives expressly for use in the Registration Statement, the Prospectus, any amendment or supplement thereto, or any preliminary prospectus.

If any suit, action, proceeding (including any governmental or regulatory investigation), claim or demand shall be brought or asserted against any person in respect of which indemnity may be sought pursuant to the preceding paragraphs of this Section 7, such person (the "Indemnified Person") shall promptly notify the person or persons against whom such indemnity may be sought (each, an "Indemnifying Person") in writing, and such Indemnifying Persons, upon request of the Indemnified Person, shall retain counsel reasonably satisfactory to the Indemnified Person to represent the Indemnified Person and any others the Indemnifying Persons may designate in such proceeding and shall pay the fees and expenses of such counsel related to such proceeding. In any such proceeding, any Indemnified Person

shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person and not the Indemnifying Persons unless (i) the Indemnifying Persons and the Indemnified Person shall have mutually agreed to the contrary, (ii) the Indemnifying Person has failed within a reasonable time to retain counsel reasonably satisfactory to the Indemnified Person or (iii) the named parties in any such proceeding (including any impleaded parties) include both an Indemnifying Person and the Indemnified Person and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood that no Indemnifying Person shall, in connection with any proceeding or related proceeding in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all Indemnified Persons, and that all such fees and expenses shall be reimbursed as they are incurred. Any such separate firm for the Underwriters, each affiliate of any Underwriter which assists such Underwriter in the distribution of the Shares and such control persons of Underwriters shall be designated in writing by J.P. Morgan Securities Inc. and any such separate firm for the Company, its directors, its officers who sign the Registration Statement and such control persons of the Company shall be designated in writing by the Company. Notwithstanding anything contained herein to the contrary, if indemnity may be sought pursuant to the second paragraph of this Section 7 in respect of such action or proceeding, then in addition to such separate firm for the Indemnified Persons, the Indemnifying Person shall be liable for the reasonable fees and expenses of not more than one separate firm (in addition to any local counsel) for the Designated Underwriters for the defense of any losses, claims, damages and liabilities arising out of the Directed Share Program, and all other persons, if any, who control either of the Designated Underwriters within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act. No Indemnifying Person shall be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, each Indemnifying Person agrees to indemnify any Indemnified Person from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an Indemnified Person shall have requested an Indemnifying Person to reimburse the Indemnified Person for fees and expenses of counsel as contemplated by the second and third sentences of this paragraph, such Indemnifying Person agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 90 days after receipt by such Indemnifying Person of the aforesaid request and (ii) such Indemnifying Person shall not have reimbursed the Indemnified Person in accordance with such request prior to the date of such settlement. No Indemnifying Person shall, without the prior written consent of the Indemnified Person, effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Person is or could have been a party and indemnity could have been sought hereunder by such Indemnified Person, unless such settlement includes an unconditional release of such Indemnified Person from all liability on claims that are the subject matter of such proceeding.

If the indemnification provided for in the first four paragraphs of this Section 7 is unavailable to an Indemnified Person or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each Indemnifying Person under such paragraph, in lieu of indemnifying such Indemnified Person thereunder, shall contribute to the amount paid or payable by such Indemnified Person as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other hand from the offering of the Shares or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and the Underwriters on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other hand shall be deemed to be in the same respective proportions as the net proceeds from the offering (before deducting expenses) received by the Company and the total underwriting discounts received by the Underwriters, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate public offering price of the Shares. The relative fault of the Company on the one hand and the Underwriters on the other hand shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purposes) or by any other method of allocation that does not take account of the equitable considerations referred to in the immediately preceding paragraph. The amount paid or payable by an Indemnified Person as a result of the losses, claims, damages and liabilities referred to in the immediately preceding paragraph shall be deemed to include, subject to the limitations set forth above, any legal or other expenses incurred by such Indemnified Person in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 7, in no event shall an Underwriter be required to contribute any amount in excess of the amount by which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations to contribute pursuant to this Section 7 are several in proportion to the respective number of Shares set forth opposite their names in Schedule I hereto, and not joint.

The remedies provided for in this Section 7 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.

The indemnity and contribution agreements contained in this Section 7 and the representations and warranties of the Company set forth in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Underwriter or any person controlling any Underwriter or by or on behalf of the Company, its officers or directors or any person controlling the Company and (iii) acceptance of and payment for any of the Shares.

8. Notwithstanding anything herein contained, this Agreement (or the obligations of the several Underwriters with respect to the Option Shares) may be terminated in the absolute discretion of the Representatives, by notice given to the Company, if after the execution and delivery of this Agreement and prior to the Closing Date (or, in the case of the Option Shares, prior to the Additional Closing Date) (i) trading generally shall have been suspended or materially limited on or by, as the case may be, any of the New York Stock Exchange, the American Stock Exchange or the Nasdaq National Market, (ii) a general moratorium on commercial banking activities in New York shall have been declared by either federal or New York State authorities, or (iii) there shall have occurred any outbreak or escalation of hostilities or any change in financial markets or any calamity or crisis that, in the judgment of the Representatives, is material and adverse and which, in the judgment of the Representatives, makes it impracticable to market the Shares being delivered at the Closing Date or the Additional Closing Date, as the case may be, on the terms and in the manner contemplated in the Prospectus.

9. This Agreement shall become effective upon the later of (x) execution and delivery hereof by the parties hereto and (y) release of notification of the effectiveness of the Registration Statement (or, if applicable, any post-effective amendment) by the Commission.

If on the Closing Date or the Additional Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Shares which it or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of Shares to be purchased on such date, the other Underwriters shall be obligated severally in the proportions that the number of Shares set forth opposite their respective names in Schedule I bears to the aggregate number of Underwritten Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as the Representatives may specify, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date; provided that in no event shall the number of Shares that any Underwriter has agreed to purchase

pursuant to Section 1 be increased pursuant to this Section 9 by an amount in excess of one-tenth of such number of Shares without the written consent of such Underwriter. If on the Closing Date or the Additional Closing Date, as the case may be, any Underwriter or Underwriters shall fail or refuse to purchase Shares which it or they have agreed to purchase hereunder on such date, and the aggregate number of Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Shares to be purchased on such date, and arrangements satisfactory to the Representatives for the purchase of such Shares are not made within 36 hours after such default, this Agreement (or the obligations of the several Underwriters to purchase the Option Shares, as the case may be) shall terminate without liability on the part of any non-defaulting Underwriter. In any such case the Representatives shall have the right to postpone the Closing Date (or, in the case of the Option Shares, the Additional Closing Date), but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement and in the Prospectus or in any other documents or arrangements may be effected. Any action taken under this paragraph shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

10. If this Agreement shall be terminated by the Underwriters, or any of them, other than pursuant to Section 8, because of any failure or refusal on the part of the Company to comply with the terms or to fulfill any of the conditions of this Agreement, or if for any reason the Company shall be unable to perform its obligations under this Agreement or any condition of the Underwriters' obligations cannot be fulfilled, the Company agrees to reimburse the Underwriters or such Underwriters as have so terminated this Agreement with respect to themselves, severally, for all out-of-pocket expenses (including the fees and expenses of its counsel) reasonably incurred by the Underwriter in connection with this Agreement or the offering contemplated hereunder.

11. This Agreement shall inure to the benefit of and be binding upon the Company, the Underwriters, any controlling persons referred to herein and their respective successors and assigns. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any other person, firm or corporation any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. No purchaser of Shares from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

12. Any action by the Underwriters hereunder may be taken by the Representatives jointly or by J.P. Morgan Securities Inc. alone on behalf of the Underwriters, and any such action taken by the Representatives jointly or by J.P. Morgan Securities Inc. alone shall be binding upon the Underwriters. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Underwriters shall be given to the

Representatives, c/o J.P. Morgan Securities Inc., 60 Wall Street, New York, New York 10260 (telefax: (212) 648-5705), Attention: Syndicate Department, copy to Cahill Gordon & Reindel, 80 Pine Street, New York, New York 10005 (telefax: 212-269-5420), Attention: Gerald S. Tanenbaum, Esq. Notices to the Company shall be given to it at its office, 4000 Research Forest Drive, The Woodlands, TX 77381 (telefax: 281-364-0155), Attention: Jeffrey L. Wade. Copies of notices to the Company should be given to Andrews & Kurth L.L.P., 600 Travis, Suite 4200, Houston, TX 77002 (telefax: 713-220-4285), Attention: David P. Oelman.

13. This Agreement may be signed in counterparts, each of which shall be an original and all of which together shall constitute one and the same instrument.

14. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO THE CONFLICTS OF LAWS PROVISIONS THEREOF.

[Signature Pages Follow]

If the foregoing is in accordance with your understanding,
please sign and return five counterparts hereof.

Very truly yours,

LEXICON GENETICS
INCORPORATED

By: _____

Name:
Title:

Accepted: [], 2000

J.P. MORGAN SECURITIES INC.
CREDIT SUISSE FIRST BOSTON CORPORATION
CIBC WORLD MARKETS CORP.
DAIN RAUSCHER INCORPORATED
PUNK, ZIEGEL & COMPANY, L.P.
Acting severally on behalf of themselves
and the several Underwriters listed
in Schedule I hereto.

By: J.P. MORGAN SECURITIES INC.

By: _____
Name:
Title:

SCHEDULE I

| Underwriter ----- | Number of Underwritten Shares To Be Purchased ----- |
|---|---|
| J.P. Morgan Securities Inc..... | |
| Credit Suisse First Boston Corporation..... | |
| CIBC World Markets Corp..... | |
| Dain Rauscher Incorporated..... | |
| Punk, Ziegel & Company, L.P..... | |
| Total..... | [] ===== |

[Form of Lock-Up Agreement]

RESTATED CERTIFICATE OF INCORPORATION

OF

LEXICON GENETICS INCORPORATED

LEXICON GENETICS INCORPORATED (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware ("DGCL"), hereby certifies as follows pursuant to Sections 242 and 245 of the DGCL:

- FIRST: The name of the Corporation is "Lexicon Genetics Incorporated."
- SECOND: The original Certificate of Incorporation of the Corporation was filed in the Office of the Secretary of State of the State of Delaware (the "Secretary of State") on July 7, 1995. An Amended and Restated Certificate of Incorporation of the Corporation was filed in the Office of the Secretary of State on May 6, 1998.
- THIRD: The board of directors of the Corporation, in accordance with Sections 242 and 245 of the DGCL, (i) adopted and approved this Restated Certificate of Incorporation (including the amendments to the Corporation's Certificate of Incorporation effected hereby) and (ii) proposed that the Corporation's stockholders adopt and approve this Restated Certificate of Incorporation (including the amendments to the Corporation's Certificate of Incorporation effected hereby).
- FOURTH: The holders of not less than a majority of the outstanding shares of the Corporation's common stock, par value \$.001 per share, and preferred stock, par value \$0.01 per share, in accordance with Section 228 of the DGCL, approved and adopted on behalf of the stockholders this Restated Certificate of Incorporation (including the amendments to the Corporation's Certificate of Incorporation effected hereby). All designations of series of preferred stock pursuant to the Certificate of Designations of Series A Cumulative Preferred Stock shall continue to be integrated into this Amended and Restated Certificate of Incorporation until eliminated by the Corporation's Board of Directors in accordance with Section 151(g) of the DGCL.
- FIFTH: This Restated Certificate of Incorporation shall become effective on its filing with the Secretary of State.
- SIXTH: The Amended and Restated Certificate of Incorporation of the Corporation is hereby amended and restated to read in its entirety as follows:

ARTICLE I

Name

The name of the Corporation is "Lexicon Genetics Incorporated."

ARTICLE II

Registered Office and Registered Agent

The registered office of the Corporation in the State of Delaware is located at Corporation Trust Center, 1209 Orange Street in the City of Wilmington, County of New Castle. The name of the registered agent of the Corporation at such address is The Corporation Trust Company.

ARTICLE III

Purpose

The purpose for which the Corporation is organized is to engage in any lawful acts and activities for which corporations may be organized under the General Corporation Law of the State of Delaware ("DGCL").

ARTICLE IV

Capitalization

Section 4.01. Authorized Capital. (a) The total number of shares of stock that the Corporation shall have the authority to issue is 125,000,000 shares of capital stock, consisting of (i) 5,000,000 shares of preferred stock, par value \$0.01 per share (the "Preferred Stock"), and (ii) 120,000,000 shares of common stock, par value \$0.001 per share (the "Common Stock").

(b) Subject to the provisions of this Certificate of Incorporation and the Preferred Stock Designation (as defined below) creating any series of Preferred Stock, the Corporation may issue shares of its capital stock from time to time for such consideration (not less than the par value thereof) as may be fixed by the Board of Directors of the Corporation (the "Board of Directors"), which is expressly authorized to fix the same in its absolute discretion subject to the foregoing conditions. Shares so issued for which the consideration shall have been paid or delivered to the Corporation shall be deemed fully paid stock and shall not be liable to any further call or assessment thereon, and the holders of such shares shall not be liable for any further payments in respect of such shares.

(c) The right to cumulate votes for the election of directors as provided in Section 214 of the DGCL shall not be granted and is hereby expressly denied.

(d) No stockholder of the Corporation shall by reason of his or her holding shares of any class of capital stock of the Corporation have any preemptive or preferential right to acquire or subscribe for any additional, unissued or treasury shares (whether now or hereafter acquired) of any class of capital stock of the Corporation now or hereafter to be authorized, or any notes, debentures, bonds or other securities convertible into or carrying any right, option or warrant to subscribe for or acquire shares of any class of capital stock of the Corporation now or hereafter to be authorized, whether or not the issuance of any such shares or such notes, debentures, bonds or other securities would adversely affect the dividends or voting or other rights of that stockholder.

Section 4.02. Preferred Stock. (a) The Preferred Stock may be issued from time to time in one or more series. Authority is hereby expressly granted to and vested in the Board of Directors to authorize from time to time the issuance of Preferred Stock in one or more series. With respect to each series of Preferred Stock authorized by it, the Board of Directors shall be authorized to establish by resolution or resolutions, and by filing a certificate pursuant to applicable law of the State of Delaware (the "Preferred Stock Designation"), the following to the fullest extent now or hereafter permitted by the DGCL:

(1) the designation of such series;

(2) the number of shares to constitute such series;

(3) whether such series is to have voting rights (full, special or limited) or is to be without voting rights;

(4) if such series is to have voting rights, whether or not such series is to be entitled to vote as a separate class either alone or together with the holders of the Common Stock or one or more other series of Preferred Stock;

(5) the preferences and relative, participating, optional, conversion or other special rights (if any) of such series and the qualifications, limitations or restrictions (if any) with respect to such series;

(6) the redemption rights and price(s), if any, of such series, and whether or not the shares of such series shall be subject to the operation of retirement or sinking funds to be applied to the purchase or redemption of such shares for retirement and, if such retirement or sinking funds or funds are to be established, the periodic amount thereof and the terms and provisions relative to the operation thereof;

(7) the dividend rights and preferences (if any) of such series, including, without limitation, (i) the rates of dividends payable thereon, (ii) the conditions upon which and the time when such dividends are payable, (iii) whether or not such dividends shall be cumulative or noncumulative and, if cumulative, the date or dates from which such dividends

shall accumulate and (iv) whether or not the payment of such dividends shall be preferred to the payment of dividends payable on the Common Stock or any other series of Preferred Stock;

(8) the preferences (if any), and the amounts thereof, which the holders of such series shall be entitled to receive upon the voluntary or involuntary liquidation, dissolution or winding-up of, or upon any distribution of the assets of, the Corporation;

(9) whether or not the shares of such series, at the option of the Corporation or the holders thereof or upon the happening of any specified event, shall be convertible into or exchangeable for (i) shares of Common Stock, (ii) shares of any other series of Preferred Stock or (iii) any other stock or securities of the Corporation;

(10) if such series is to be convertible or exchangeable, the price or prices or ratio or ratios or rate or rates at which such conversion or exchange may be made and the terms and conditions (if any) upon which such price or prices or ratio or ratios or rate or rates may be adjusted; and

(11) such other rights, powers and preferences with respect to such series as may to the Board of Directors seem advisable.

Any series of Preferred Stock may vary from any other series of Preferred Stock in all or all of the foregoing respects and in any other manner.

(b) The Board of Directors may, with respect to any existing series of Preferred Stock but subject to the Preferred Stock Designation creating such series, (i) increase the number of shares of Preferred Stock designated for such series by a resolution adding to such series authorized and unissued shares of Preferred Stock not designated for any other series and (ii) decrease the number of shares of Preferred Stock designated for such series by a resolution subtracting from such series shares of Preferred Stock designated for such series (but not below the number of shares of such series then outstanding), and the shares so subtracted shall become authorized, unissued and undesignated shares of Preferred Stock.

(c) No vote of the holders of the Common Stock or the Preferred Stock shall, unless otherwise expressly provided in a Preferred Stock Designation creating any series of Preferred Stock, be a prerequisite to the issuance of any shares of any series of the Preferred Stock authorized by and complying with the conditions of this Certificate of Incorporation. Shares of any series of Preferred Stock that have been authorized for issuance pursuant to this Certificate of Incorporation and that have been issued and reacquired in any manner by the Corporation (including upon conversion or exchange thereof) shall be restored to the status of authorized and unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors and a Preferred Stock Designation as set forth above.

Section 4.03. Common Stock. (a) The holders of shares of the Common Stock shall be entitled to vote upon all matters submitted to a vote of the common stockholders of the Corporation and shall be entitled to one vote for each share of the Common Stock held.

(b) Subject to the prior rights and preferences (if any) applicable to shares of Preferred Stock of any series, the holders of shares of the Common Stock shall be entitled to receive such dividends (payable in cash, stock or otherwise) as may be declared thereon by the Board of Directors at any time and from time to time out of any funds of the Corporation legally available therefor.

(c) In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Corporation, after payment or provision for payment of the debts and other liabilities of the Corporation and subject to the preferential or other rights (if any) of the holders of shares of the Preferred Stock in respect thereof, the holders of shares of the Common Stock shall be entitled to receive all the remaining assets of the Corporation available for distribution to its stockholders, ratably in proportion to the number of shares of the Common Stock held by them. For purposes of this paragraph (c), a liquidation, dissolution or winding-up of the Corporation shall not be deemed to be occasioned by or to include (i) any consolidation or merger of the Corporation with or into another corporation or other entity or (ii) a sale, lease, exchange or conveyance of all or a part of the assets of the Corporation.

Section 4.04. Stock Options, Warrants, etc. Unless otherwise expressly prohibited in the Preferred Stock Designation creating any series of Preferred Stock, the Corporation shall have authority to create and issue warrants, rights and options entitling the holders thereof to purchase from the Corporation shares of the Corporation's capital stock of any class or series or other securities of the Corporation for such consideration and to such persons, firms or corporations as the Board of Directors, in its sole discretion, may determine, setting aside from the authorized but unissued capital stock of the Corporation the requisite number of shares for issuance upon the exercise of such warrants, rights or options. Such warrants, rights and options shall be evidenced by one or more instruments approved by the Board of Directors. The Board of Directors shall be empowered to set the exercise price, duration, time for exercise and other terms of such warrants, rights or options; provided, however, that the consideration to be received for any shares of capital stock subject thereto shall not be less than the par value thereof.

ARTICLE V

Directors

Section 5.01. Number and Term. The number of directors of the Corporation shall from time to time be fixed exclusively by the Board of Directors in accordance with, and subject to the limitations set forth in, the bylaws of the Corporation (the "Bylaws"); provided, however, that the Board of Directors shall at all times consist of a minimum of three and a maximum of twelve members, subject, however, to increases above twelve members as may be required in order to permit the holders of any series of Preferred Stock to exercise their right (if any) to elect additional directors under specified circumstances. No decrease in the number of directors shall

have the effect of shortening the term of any incumbent director. Anything in this Certificate of Incorporation or the Bylaws to the contrary notwithstanding, each director shall hold office until his successor is elected and qualified or until his earlier death, resignation or removal.

Section 5.02. Limitation of Personal Liability. (a) No person who is or was a director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL or (iv) for any transaction from which the director derived an improper personal benefit.

(b) If the DGCL is hereafter amended to authorize corporate action further limiting or eliminating the personal liability of directors, then the personal liability of the directors to the Corporation or its stockholders shall be limited or eliminated to the fullest extent permitted by the DGCL, as so amended from time to time.

Section 5.03. Classification. The Board of Directors shall be divided into three classes designated as Class I, Class II and Class III, respectively, all as nearly equal in number as possible, with each director then in office receiving the classification to be determined with respect to such director by the Board of Directors. The initial term of office of Class I directors shall expire at the annual meeting of the Corporation's stockholders in 2001. The initial term of office of Class II directors shall expire at the annual meeting of stockholders in 2002. The initial term of office of Class III directors shall expire at the annual meeting of stockholders in 2003. Each director elected at an annual meeting of stockholders to succeed a director whose term is then expiring shall hold office until the third annual meeting of stockholders after his election or until his successor is elected and qualified or until his earlier death, resignation or removal. Increases and decreases in the number of directors shall be apportioned among the classes of directors so that all classes will be as nearly equal in number as possible. No decrease in the number of directors constituting the Corporation's Board of Directors shall shorten the term of any incumbent director.

Section 5.04. Nomination and Election. (a) Nominations of persons for election or reelection to the Board of Directors may be made by or at the direction of the Board of Directors. The Bylaws may set forth procedures for the nomination of persons for election or reelection to the Board of Directors and only persons who are nominated in accordance with such procedures (if any) shall be eligible for election or reelection as directors of the Corporation; provided, however, that such procedures shall not infringe upon (i) the right of the Board of Directors to nominate persons for election or reelection to the Board of Directors or (ii) the rights of the holders of any class or series of Preferred Stock, voting separately by class or series, to elect additional directors under specified circumstances.

(b) Each director shall be elected in accordance with this Certificate of Incorporation, the Bylaws and applicable law. Election of directors by the Corporation's stockholders need not be by written ballot unless the Bylaws so provide.

Section 5.05. Removal. No director of any class may be removed before the expiration of his term of office except for cause and then only by the affirmative vote of the holders of not less than a majority in voting power of all the outstanding shares of capital stock of the Corporation entitled to vote generally in an election of directors, voting together as a single class. The Board of Directors may not remove any director, and no recommendation by the Board of Directors that a director be removed may be made to the Corporation's stockholders unless such recommendation is set forth in a resolution adopted by the affirmative vote of not less than 66-2/3% of the whole Board of Directors.

Section 5.06. Vacancies. (a) In case any vacancy shall occur on the Board of Directors because of death, resignation or removal, such vacancy may be filled only by a majority (or such higher percentage as may be specified in the Bylaws) of the directors remaining in office (though less than a quorum), or by the sole remaining director. The director so appointed shall serve for the unexpired term of his predecessor or until his successor is elected and qualified or until his earlier death, resignation or removal. If there are no directors then in office, an election of directors may be held in the manner provided by applicable law.

(b) Any newly-created directorship resulting from any increase in the number of directors may be filled only by a majority (or such higher percentage as may be specified in the Bylaws) of the directors then in office (though less than a quorum), or by the sole remaining director. The director so appointed shall be assigned to such class of directors as such majority of directors or the sole remaining director, as the case may be, shall determine; provided, however, that newly-created directorships shall be apportioned among the classes of directors so that all classes will be as nearly equal in number as possible. Each director so appointed shall hold office for the remaining term of the class to which he is assigned or until his successor is elected and qualified or until his earlier death, resignation or removal.

(c) Except as expressly provided in this Certificate of Incorporation or as otherwise provided by applicable law, stockholders of the Corporation shall not have the right to fill vacancies on the Board of Directors, including newly-created directorships.

Section 5.07. Subject to Rights of Holders of Preferred Stock. Notwithstanding the foregoing provisions of this Article V, if the Preferred Stock Designation creating any series of Preferred Stock entitles the holders of such Preferred Stock, voting separately by class or series, to elect additional directors under specified circumstances, then all provisions of such Preferred Stock Designation relating to the nomination, election, term of office, removal, filling of vacancies and other features of such directorships shall, as to such directorships, govern and control over any conflicting provisions of this Article V, and such directors so elected need not be divided into classes pursuant to this Article V unless expressly provided by the provisions of such Preferred Stock Designation.

ARTICLE VI

Amendment of Bylaws

The Board of Directors is expressly authorized and empowered to adopt, alter, amend or repeal the Bylaws. Stockholders of the Corporation shall have the power to alter, amend, expand or repeal the Bylaws but only by the affirmative vote of the holders of not less than 66-2/3% in voting power of all outstanding shares of capital stock of the Corporation entitled to vote generally at an election of directors, voting together as a single class.

ARTICLE VII

Actions and Meetings of Stockholders

Section 7.01. No Action by Written Consent. No action shall be taken by the stockholders of the Corporation except at an annual or special meeting of stockholders. Stockholders of the Corporation may not act by written consent in lieu of a meeting.

Section 7.02. Meetings. (a) Meetings of the stockholders of the Corporation (whether annual or special) may only be called by the Board of Directors or by such officer or officers of the Corporation as the Board of Directors may from time to time authorize to call meetings of the stockholders of the Corporation. Stockholders of the Corporation shall not be entitled to call any meeting of stockholders or to require the Board of Directors or any officer or officers of the Corporation to call a meeting of stockholders except as otherwise expressly provided in the Bylaws or in the Preferred Stock Designation creating any series of Preferred Stock.

(b) Stockholders of the Corporation shall not be entitled to propose business for consideration at any meeting of stockholders except as otherwise expressly provided in the Bylaws or in the Preferred Stock Designation creating any series of Preferred Stock.

(c) Business transacted at any special meeting of stockholders shall be limited to the purposes stated in the notice or waivers of notice of such meeting. The person presiding at a meeting of stockholders may determine whether business has been properly brought before the meeting and, if the facts so warrant, such person may refuse to transact any business at such meeting which has not been properly brought before such meeting.

Section 7.03. Appoint and Remove Officers, etc. The stockholders of the Corporation shall have no right or power to appoint or remove officers of the Corporation nor to abrogate the power of the Board of Directors to elect and remove officers of the Corporation. The stockholders of the Corporation shall have no power to appoint or remove directors as members of committees of the Board of Directors nor to abrogate the power of the Board of Directors to establish one or more such committees or the power of any such committee to exercise the powers and authority of the Board of Directors.

Section 7.04. Compromises and Arrangements. Whenever a compromise or arrangement is proposed between this corporation and its creditors or any class of them and/or between this corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this corporation under Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this corporation under Section 279 of Title 8 of the Delaware code order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this corporation, as the case may be, and also on this corporation.

ARTICLE VIII

Indemnification of Directors and Officers

The Corporation shall indemnify, to the fullest extent permitted by applicable law and pursuant to the Bylaws, each person who is or was a director or officer of the Corporation, and may indemnify each employee and agent of the Corporation and all other persons whom the Corporation is authorized to indemnify under the provisions of the DGCL.

ARTICLE IX

Election to be Governed by Section 203 of the DGCL

The Corporation hereby elects to be governed by Section 203 of the DGCL; provided, however, that the provisions of this Article IX shall not apply to restrict a business combination between the Corporation and an interested stockholder (as defined in Section 203 of the DGCL) of the Corporation if either (i) such business combination was approved by the Board of Directors prior to the time that such stockholder became an interested stockholder or (ii) such stockholder became an interested stockholder as a result of, and at or prior to the effective time of, a transaction which was approved by the Board of Directors prior to the time that such stockholder became an interested stockholder.

ARTICLE X

Amendment of Certificate of Incorporation

The Corporation reserves the right to amend, alter, change or repeal any provisions contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by applicable law, and all rights conferred upon stockholders, directors or any other persons by or pursuant to this Certificate of Incorporation are granted subject to this reservation. Notwithstanding the foregoing or any other provision of this Certificate of Incorporation or any provision of law that might otherwise permit a lesser or no vote, the provisions of this Article X and of Articles V, VI, VII and VIII may not be repealed or amended in any respect, and no provision inconsistent with any such provision or imposing cumulative voting in the election of directors may be added to this Certificate of Incorporation, unless such action is approved by the affirmative vote of the holders of not less than 66-2/3% in voting power of all outstanding shares of capital stock of the Corporation entitled to vote generally at an election of directors, voting together as a single class; provided, however, that any amendment or repeal of Section 5.02 or Article VIII of this Certificate of Incorporation shall not adversely affect any right or protection existing thereunder in respect of any act or omission occurring prior to such amendment or repeal and, provided further, that no Preferred Stock Designation shall be amended after the issuance of any shares of the Series of Preferred Stock created thereby, except in accordance with the terms of such Preferred Stock Designation and the requirements of applicable law.

ARTICLE XI

Voting Requirements Not Exclusive

The voting requirements contained in this Certificate of Incorporation shall be in addition to the voting requirements imposed by law or by the Preferred Stock Designation creating any series of Preferred Stock.

IN WITNESS WHEREOF, this Restated Certificate of Incorporation has been executed for and on behalf and in the name of the Corporation by its officers thereunto duly authorized on April 5, 2000.

LEXICON GENETICS INCORPORATED

By: /s/ ARTHUR T. SANDS

Arthur T. Sands
President and Chief Executive Officer

Attest:

By: /s/ JEFFREY L. WADE

Jeffrey L. Wade
Secretary

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the use of our report (and to all references to our Firm) included in or made a part of this registration statement.

/s/ Arthur Andersen LLP

Houston, Texas
April 4, 2000