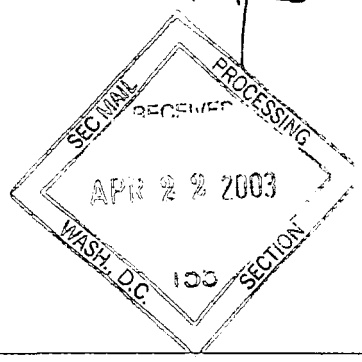
ARS



SEQUENOM® INC

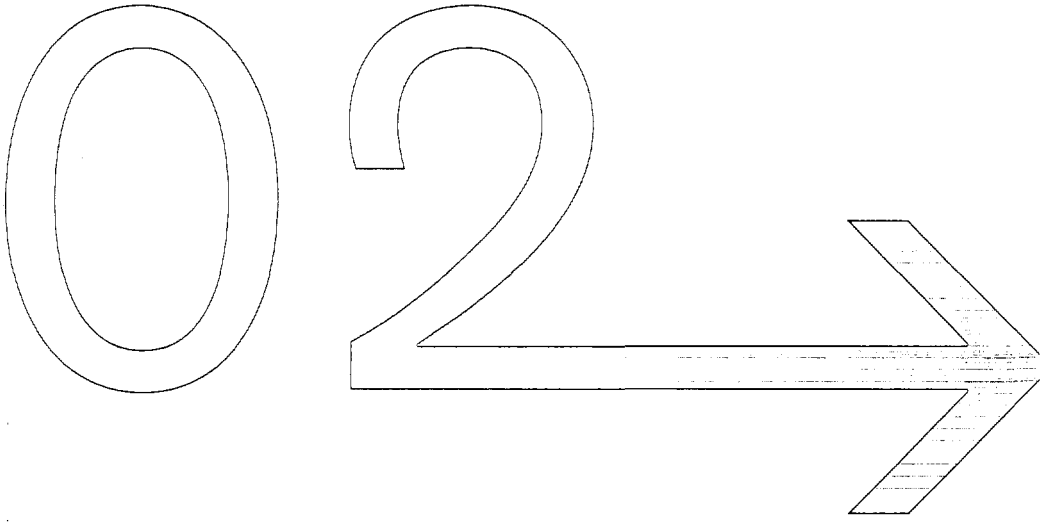
Annual Report 2002
and Form 10-K

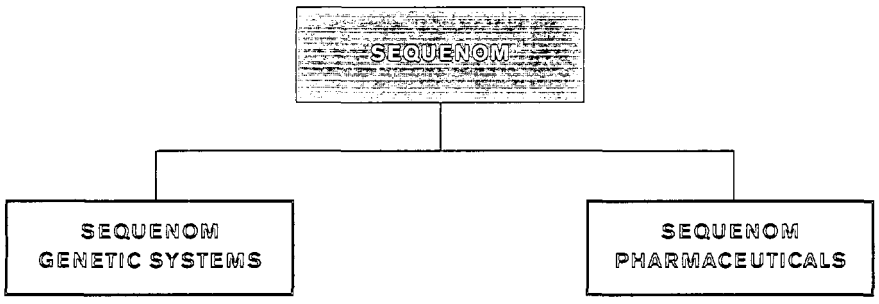
P.E.
12-31-02

2002
TIMELINE

A YEAR
IN REVIEW

"Our achievements in 2002 have driven SEQUENOM to a *tangible inflection point* where success fostered more definition and clarity." - Toni Schuh, Ph.D., President and Chief Executive Officer





.01.02
□ Generated Industry's Largest Validated SNP Assay Portfolio

.02.02
□ Established Asia-Pacific Office

SEQUENOM
is a leading genetics company organized into two distinct business units: SEQUENOM Genetic Systems and SEQUENOM Pharmaceuticals.

The two business units combine to capitalize on the Company's high-performance MassARRAY DNA analysis technology, SNP assay portfolio, disease gene discovery programs and extensive DNA sample repository.

SEQUENOM Genetic Systems
is dedicated to the sales and support of the Company's MassARRAY DNA analysis products and the continual expansion of platform applications.

SEQUENOM Pharmaceuticals
applies the power of human genetics to systematically identify candidate disease genes that affect significant portions of the overall population. The pharmaceutical unit focuses on disease gene discovery, target identification, functional validation and ultimately diagnostic and therapeutic products.

This annual report contains forward-looking statements, including but not limited to, statements regarding our "expectations," "beliefs," "hopes," "goals," "intentions," "anticipations," "plans," "strategies," "mission," "vision," and future "milestones;" in addition, the words "should" and "will" and expressions similar to any of the above used in this report, identify forward-looking statements. Such statements are based on management's current expectations and are subject to a number of risks, uncertainties, and factors, including those set forth in our Securities and Exchange Commission filings including our Form 10-K for the year ended December 31, 2002, accompanying this report, that could cause actual results to differ materially from those described in the forward-looking statements. Our expectations and the events, conditions, and circumstances on which these forward-looking statements are based, may change, and we caution investors that there can be no assurance that actual results or business conditions will not differ materially from those projected or suggested herein.

Toni Schuh, Ph.D.
President and Chief
Executive Officer

.03.02

- **Introduced New Ultra-High Throughput Genotyping System**
- **Entered Partnership with CuraGen to Validate Candidate Disease Genes**

We understand the complexity of the human genome and human disease. Our products create a sense of accomplishment that is widespread, meaningful and relevant to all humanity.

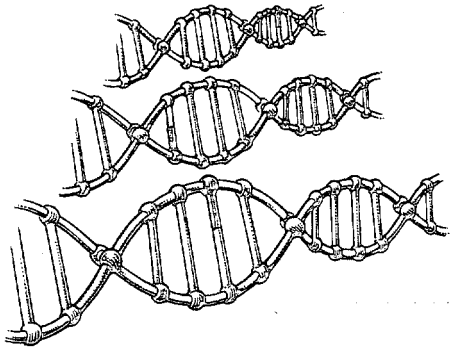
TO OUR SHAREHOLDERS

Last year we spoke of SEQUENOM's vision to lead "The Renaissance of Genetics." This year we bring you the tangible evidence that we are realizing our goals and validating our strategy. Last year we alluded to a promising strategy and an elegant concept. Today we bring you the specific proof of our discoveries that are resulting from these ideals.

Our accomplishments during the past year have driven our Company to a tangible inflection point balanced between faith and accomplishment, success and responsibility. Despite the challenging environment, both of our business units – SEQUENOM Genetic Systems and SEQUENOM Pharmaceuticals – continue to execute on their business plans and position our Company for a bright and secure future.

SEQUENOM GENETIC SYSTEMS

Our genetic systems unit is dedicated to the sales and support of our MassARRAY DNA analysis products and the continued expansion of platform applications. Until the latter part of 2002, our MassARRAY platform primarily supported one core application, High-Performance Genotyping. With an installed base approaching 100 systems, we have successfully penetrated this market and our technology is now



The sequencing of the human genome has provided an initial roadmap for understanding genetic variation. SEQUENOM's technology can be used to qualify and quantify genetic variation in virtually any type of high-performance genetic analysis.

.04.02

- ☐ **Announced 11 MassARRAY System Sales During 1st Quarter**

.05.02

- ☐ **Published Method for Rapid Large-Scale Bacterial Identification**
- ☐ **Launched Web-Based RealSNP™ Platform**

recognized as a reference standard for data quality.

In 2002, we expanded the potential of our platform to include virtually any type of high-performance analysis of genetic variation. Our launch of two new core applications, Quantitative Gene Analysis and Re-Sequencing, has enabled a number of valuable new customer applications, including Allele Frequency Analysis, Gene Expression Analysis and Targeted SNP Discovery. We believe that the expanded application base has significantly increased the addressable market for our MassARRAY products.

In addition to our new applications, other milestones and accomplishments for our genetic systems unit in 2002 included:

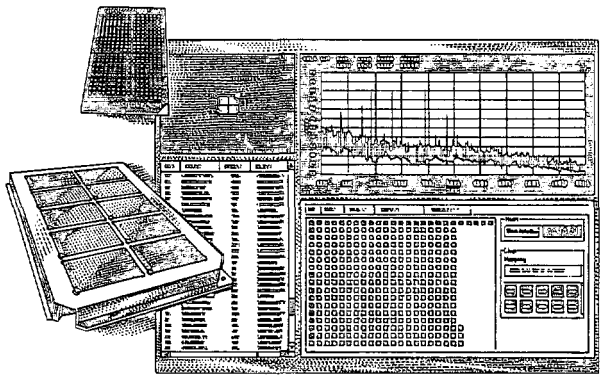
☐ **Expanded MassARRAY Product Line.** We launched two new hardware products, the MassARRAY 20K™ system and the MassARRAY Nanodispenser. The MassARRAY 20K system is designed for complete automation of up to 20,000 analytical reactions per day. The MassARRAY Nanodispenser has the capacity to nearly double the throughput levels of currently available nanoliter liquid transfer systems. Both products increase the speed and efficiency of large-scale genetics studies.

☐ **Increased Demand for MassARRAY Technology.** We raised our installed base of MassARRAY systems at customer sites worldwide by approximately 60 percent. We also added a number of leading genetic research institutions to our list of customers, including Samsung, the Stanford Human Genome Center and the Institute for Systems Biology in Seattle.

☐ **Continued Support from High Profile Customers.** Our repeat customers included the National Institutes of Health, the Whitehead Institute, Hitachi and GlaxoSmithKline.

☐ **Established Asia-Pacific Office.** We established an Asia-Pacific office to support our growing base of customers in the region. The office is located in Brisbane at the Queensland Institute of Medical Research, one of Australia's largest medical research facilities and a SEQUENOM customer.

We continue to make significant progress positioning our MassARRAY technology as the leading high-performance DNA analysis platform and remain on track to achieve cash flow breakeven for our genetic systems unit in the fourth quarter of 2003.



The MassARRAY system is SEQUENOM's platform for high-performance DNA analysis. The technology is the cornerstone of the Company's genetic systems unit and is recognized as a reference standard for data quality.

.06.02

□ Completed Genome-Wide Scan for Skin Cancer

SEQUENOM PHARMACEUTICALS

Our pharmaceutical unit has developed what we believe is the industry's most comprehensive genetic discovery and target validation process. It is based on the application of our advanced genetic discovery approach to identify candidate disease genes that are then functionally validated and characterized in human cell lines. We carry out our genetic discovery program by applying our advanced genetic discovery tools to DNA samples from our sample populations of both diseased and healthy individuals. Further development and validation of genetically identified targets is carried out in an array of human cell lines with a proprietary set of cell assay screening technologies.

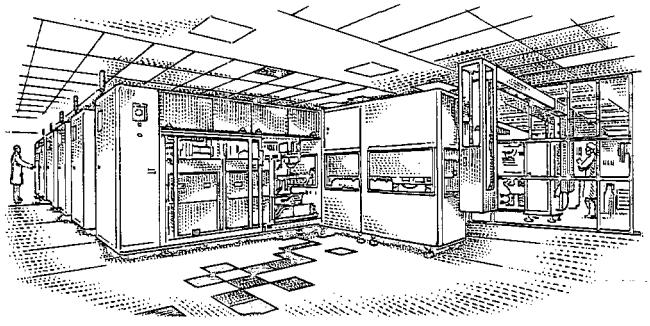
In 2002, we completed eight high-resolution scans of the human genome. The first scan used our healthy population DNA bank to identify genes with a significant impact on human health. Approximately 100,000 validated SNP assays were measured across the DNA of 1,500 individuals, with several high-confidence targets identified. Similarly, we completed full genome scans in skin cancer, breast cancer, HDL-cholesterol, osteoarthritis, schizophrenia, lung cancer and adult-onset diabetes populations, typically using approximately 28,000 SNP markers across the DNA of more than 1,000 individuals in each scan. These scans are yielding impressive portfolios of candidate disease genes.

In addition to these scans, other milestones for our pharmaceutical unit in 2002 included:

□ **Validated Genetic Targets.** We completed genetic validation of targets from several of our high-resolution scans. We discovered that potential targets are often within defined and characterized protein families and pathways, making them more amenable to rapid drug discovery and development. We believe that the increased quality of such validated drug targets should significantly improve the cost efficiency, speed and success of drug development.

□ **Launched Genome-Wide Marker Sets.** We launched our genome-wide marker sets of 28,000, 53,000 and 103,000 SNPs. Our validated marker sets span the human genome with concentrations in gene-rich regions. The markers were carefully selected from a total pool of more than 2 million SNP candidates.

□ **Published Method for Genome-Wide Scans.** Our method for conducting high-density genome scans was published in the



A key component of SEQUENOM's internal discovery genetics programs is the MassARRAY 200K™ system. The system is capable of up to 200,000 individual reactions per day, or 1 million genotypes when optimized for multiplexing.

.06.02
□ **Announced Joint Research Agreement with Samsung**

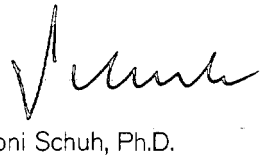
.06.02
□ **Completed Genome-Wide Scan for Age-Related Disease**

Proceedings of the National Academy of Sciences. The findings demonstrated the proof of concept for using pooled DNA from multiple individuals with our MassARRAY technology as a method for discovering potential disease-related variations in the human genome.

□ **Established Internal Biology, Assay and Drug Discovery Capabilities.** We established internal biology, assay and drug discovery capabilities through our acquisition of Axiom Biotechnologies, a privately held biotechnology company. These capabilities have been integrated with our target discovery process and are expected to accelerate functional validation of our targets; a process that we believe will increase the value and utility of our candidate disease genes.

Our pharmaceutical unit has demonstrated that it is possible to systematically identify apparent major genetic contributors to common human diseases. In addition to our internal efforts for downstream validation of our genetic targets, our mission for the pharmaceutical unit in 2003 is to create the most effective and efficient drug discovery process, capitalizing on the power of discovery genetics. We remain committed to our vision of building the leading genetics-based pharmaceutical business.

We would like to thank our employees and shareholders who have made these accomplishments possible. As we reach our goals, we continue to set higher standards that should result in continued technical innovation, new application development and a better understanding of the genes that cause major disease, furthering our efforts to treat those diseases. In the coming year, we will dedicate ourselves to addressing needs that are widespread, innovations that are commercially important, and genetic discovery that is medically important and relevant to all humanity.



Toni Schuh, Ph.D.
President and Chief Executive Officer

Charles R. Cantor, Ph.D.
Chief Scientific Officer

.08.02
□ Completed Genome-Wide Scan for Breast Cancer

The distinguishing factor of our technology is data quality. Our systems are proven and the accuracy of the data is unparalleled. Without high-quality data, there is little hope for meaningful human genetics studies.

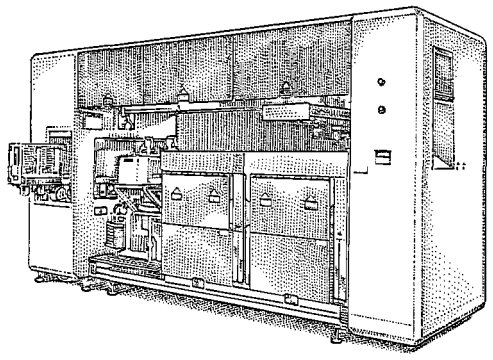
SEQUENOM GENETIC SYSTEMS

The sequencing of the human genome ushered in a new era for medical research. For the first time researchers have an initial roadmap for understanding complex biological interactions. With this new vision comes the need for conducting ever-larger numbers of DNA analyses while increasing the accuracy and efficiency required by researchers incorporating this understanding.

SEQUENOM has addressed this challenge by developing and commercializing a suite of products and applications to accelerate and improve virtually every stage of high-performance DNA analysis. The MassARRAY system is the cornerstone of our genetic systems unit, enabling large-scale and cost-effective genetics studies. Compared to other DNA analysis technologies, our MassARRAY technology provides distinct functional advantages that result in unparalleled accuracy, precision and data quality.

MassARRAY System Components

Our standard MassARRAY system combines proprietary enzymatic reactions, miniaturized SpectroCHIP® bioarrays and sophisticated bioinformatics software with the proven method of MALDI-TOF mass spectrometry. Each of these components contributes to a higher level of performance in terms of speed, accuracy and cost efficiency.



SEQUENOM's MassARRAY 20K system automates all of the steps involved in DNA sample preparation, processing up to 20,000 genotyping reactions per day while using some of the lowest reaction volumes in the industry.

.09.02
- ☐ Launched Allele Frequency Analysis Application
- ☐ Launched MassARRAY 20K System

.09.02
- ☐ Acquired Axiom Biotechnologies

To complement our standard system, we made two strategic additions to our hardware product line in 2002. Our new MassARRAY 20K system integrates and automates all of the steps involved in DNA sample preparation, processing up to 20,000 analytical reactions in a 12-hour period. Meanwhile, our new compact MassARRAY Nanodispenser has the capacity to nearly double the throughput levels of earlier nanoliter liquid transfer systems, increasing the speed and efficiency of large-scale genetics studies.

In 2003, we expect to launch a proprietary rapid thermal cycler developed from the technology used in our MassARRAY 20K system. This thermal cycler has significant advantages over other currently available systems, including speed, resulting purity and flexibility. We also expect to launch a medium-throughput, compact MassARRAY system to address the needs of customers that do not require the throughput levels of our standard system, but still require the precision and sensitivity of our MassARRAY technology.

High-Performance Genotyping

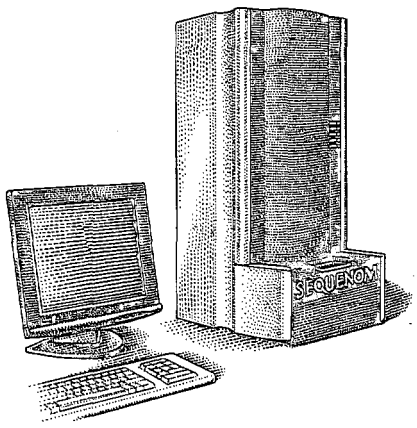
Our MassARRAY system is now well established as a leading platform for High-Performance Genotyping, the initial core application for our technology. Genotyping is the analysis of single nucleotide polymorphisms, or SNPs, the most common form of genetic variation. The power of our MassARRAY technology resides in its ability to rapidly distinguish genetic variations with a high level of precision and sensitivity.

Building on these competitive advantages, we launched two new core applications, Quantitative Gene Analysis and Re-Sequencing, expanding the potential of our platform to include virtually any type of comparative high-performance DNA analysis.

Quantitative Gene Analysis

Capitalizing on the inherent data quality of MALDI-TOF mass spectrometry, we introduced Quantitative Gene Analysis as the second core application for our MassARRAY platform. Allele Frequency Analysis was the first customer application introduced for Quantitative Gene Analysis, followed by Gene Expression Analysis. Other potential customer applications include strain-specific viral load determination, gene copy number determination, loss of heterozygosity in cancer and vaccine quality control.

Allele Frequency Analysis. SNP analysis in sample pools, or Allele Frequency Analysis, enables users to determine the frequency of a SNP in a population by quantitatively pooling hundreds of DNA samples into a single assay. This allows our customers to screen



The compact MassARRAY system will address the needs of customers that do not require the throughput levels of SEQUENOM's standard system, but still require the precision and sensitivity of the Company's MassARRAY technology.

.10.02
□ Developed Gene Expression Analysis Application

.10.02
□ Completed Genome-Wide Scan for HDL-Cholesterol

SNPs within large patient pools before including them in individual genotyping analysis, which can reduce the cost of such projects by up to 90 percent. Our pharmaceutical unit routinely uses Allele Frequency Analysis in our internal discovery genetics programs and its performance has been independently validated in a number of peer-reviewed journals.

Gene Expression Analysis. The second customer application introduced for Quantitive Gene Analysis, Gene Expression Analysis, enables precise and accurate measurements of the expression of specific genes. Due to the inherent advantages of our MassARRAY technology, relative and absolute numbers of target molecules can be determined independent of the number of DNA amplification cycles. An article describing this novel method was published in the *Proceedings of the National Academy of Sciences.*

Re-Sequencing

Introduced as the third core application for our MassARRAY platform, Re-Sequencing is an effective method for rapidly comparing a target DNA sequence with a reference DNA sequence to identify differences. This method can be used, for example, to discover the large number of SNPs present in the general population for most genes. Re-Sequencing has a demonstrated capacity to accurately scan up to three million bases of DNA sequence per MassARRAY system per day. Targeted SNP Discovery is the first of several potential customer applications for Re-Sequencing, including DNA methylation analysis, bacterial and viral typing, mutation analysis and species identification.

Targeted SNP Discovery. Using the precision, accuracy and resolution of the MassARRAY system, Targeted SNP Discovery enables users to detect and locate previously unknown SNPs with greater accuracy and speed than competing technologies. Initial studies using this application rapidly discovered up to 30 percent more SNPs than were available in public databases for even the most heavily researched genes.

We have made significant progress during the past year and will continue our mission to position the MassARRAY system as the industry's leading high-performance DNA analysis platform. We remain committed to developing accurate and efficient high-performance DNA analysis tools that enable the study of complex disease and help unlock the secrets of genetic diversity.

Charles R. Cantor, Ph.D.
Chief Scientific Officer

Andreas Braun, M.D., Ph.D.
Chief Medical Officer

.10.02
□ Sold Two Additional MassARRAY Systems to GlaxoSmithKline

.10.02
□ Announced 10 MassARRAY System Sales During 3rd Quarter

In the year 2000, a single high-density genome scan would have taken an entire year at an estimated cost of $50 million. Today, we are able to complete a comparable scan in a few weeks for less than $1 million.

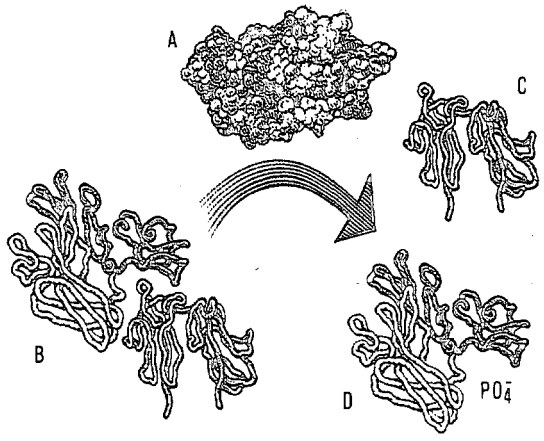
SEQUENOM PHARMACEUTICALS

Our pharmaceutical unit is applying the power of human genetics to systematically identify potential disease-related genes that affect significant portions of the overall population. The integration of our MassARRAY high-performance DNA analysis platform and industry leading SNP assay and DNA sample collections with our population genetics approach has resulted in what we believe is the industry's most efficient genetic discovery and target validation process.

Disease Gene Discovery Strategy

Our discovery genetics approach entails densely covering gene-rich regions throughout the human genome with validated SNP markers. The DNA of two populations of individuals (for example, individuals with diabetes versus those without) are then compared, or "scanned," at each marker to identify markers and genes associated with disease. Our current genome scans use 700 to 1,500 healthy and diseased individuals and up to 100,000 SNP markers.

We have shown that this approach can identify candidate disease genes that appear to affect large percentages of the general population. Due to our in-house Allele Frequency Analysis and High-Performance Genotyping capabilities and



SEQUENOM's discovery genetics programs are finding novel candidate disease targets. For example, a protein known to have important effects on sugar utilization **(C)** is normally sequestered **(B)**, blocking its action. A protein **(A)** that controls this process was identified in SEQUENOM's diabetes scan, pointing to a novel entry point for potential treatment of this disease.

.10.02

□ **Completed Genome-Wide Scan for Adult-Onset Diabetes**

unique population genetics approach, our most recent genome-wide scans are being completed at the rate of approximately one per month.

In 2002, we completed high-density scans of the human genome in eight separate disease areas: skin cancer, breast cancer, adult-onset diabetes, HDL-cholesterol, osteoarthritis, lung cancer, schizophrenia and age-related disease. Additional scans in 2003 are expected to include prostate cancer, high blood pressure, Alzheimer's disease, osteoporosis, obesity, psoriasis and inflammatory bowel disease.

These scans are yielding very encouraging portfolios of major candidate disease genes, which are then confirmed by individual genotyping and replicated in independent populations. We are finding that commercially important drug target candidates are often within defined and characterized protein families and pathways, making them tractable for rapid drug discovery and development.

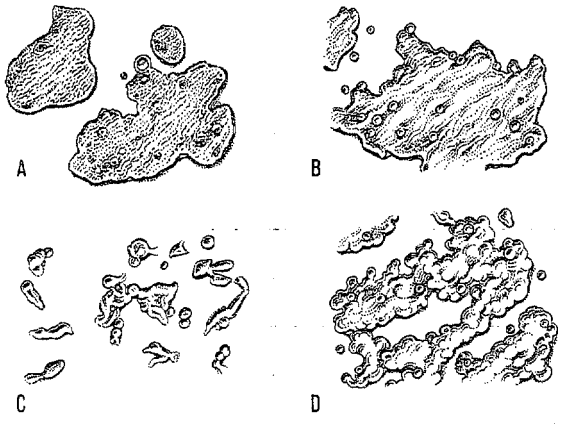
We now have genetically validated targets from several scans. We will continue development of our high-value targets through our array of human cell lines and cell assay screening technologies that we established internally during the past year.

We file patent applications for our disease-based discovery results for both therapeutic and diagnostic applications, and plan to publish our results from at least one select genome-wide scan in 2003. We also expect to establish collaborations with major pharmaceutical and biotechnology companies based on these results.

Validated Genetic Targets

Our strategy focuses on rapidly identifying a smaller and more manageable set of potential disease-related SNPs. These SNPs are then rigorously scrutinized by way of repetitive tests in the original population. Subsequently, the tests on a smaller subset of disease marker candidates are replicated in independent disease collections. Markers shown to have a disease association are further studied to try to determine which gene contains the causative changes. The biological and genetic mechanisms underlying the disease can then be explored.

Genetic targets identified through this approach will have been discovered in human populations, validated in human populations and subsequently functionally validated in human cell lines. The significant value of these types of targets is due in part to the nature of their discovery, which we believe is more applicable to the process



In this example, a specific inhibitor against a disease target identified in SEQUENOM's breast cancer scan was developed within weeks of the initial discovery of the target. In breast cancer cells, the gene-specific inhibitor blocks cell growth **(C)**, whereas inhibition of similar targets has no apparent effect **(A,B,D)**.

.11.02
□ Completed Genome-Wide Scan for Schizophrenia

.11.02
□ Completed Genome-Wide Scan for Lung Cancer

of human drug discovery than conventional approaches. We also believe that the increased quality of such validated targets should significantly improve the cost efficiency, speed and most importantly, the success of drug development.

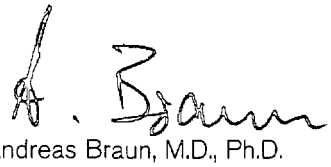
Discovery Genetics Tools

Using our unique MassARRAY 200K system, we are able to exploit ultra-high throughput levels (up to 200,000 analytical reactions per day) for internal genotyping efforts. Other tools we use for our discovery genetics programs include industry leading SNP assay and DNA sample collections.

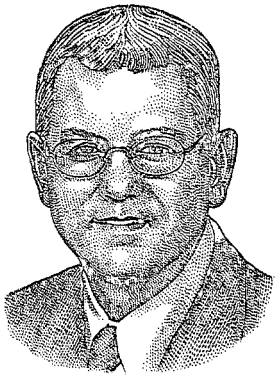
DNA Collections. We have one of the largest single collections of DNA available from diseased and control individuals. This is the raw material that we use with our SNP markers to scan for genes that cause common diseases in populations. Through the continued procurement of diseased sample collections, our DNA bank contains approximately 40,000 highly characterized DNA samples in more than 20 disease areas with up to 1,500 phenotypic data points per sample.

During the past year we demonstrated that it is possible to systematically identify major candidate disease genes as contributors to common disorders. This has been enabled by our dramatic success in driving down the time and cost of a meaningful genome-wide scan in large populations. For example, in the year 2000, a single high-density genome scan using 25,000 to 50,000 genetic markers in 1,000 to 2,000 individuals would have taken an entire year at an estimated cost of $50 million. Today, we are able to complete a comparable scan in a few weeks for less than $1 million.

We are proud of the rapid advancements that our pharmaceutical unit has made to date. We will continue our pursuit of medically important and financially sound genetic discovery by implementing the powerful combination of population genetics and our MassARRAY technology. We believe that these efforts will enable us to realize our vision of building the leading genetics-based pharmaceutical business.



Andreas Braun, M.D., Ph.D.
Chief Medical Officer



Stephen L. Zaniboni
Chief Financial Officer

.11.02
□ Completed Genome-Wide Scan for Osteoarthritis

2002 was a successful year for SEQUENOM despite challenging global economic conditions. This success has strengthened the position and long-term outlook for our Company, both strategically and financially.

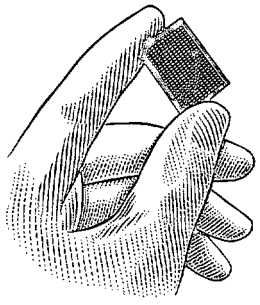
OUR FINANCIAL POSITION

SEQUENOM's revenues for the year 2002 were $30.9 million, including approximately $24.8 million in MassARRAY product-related sales. Our consumable sales accounted for approximately $9.3 million in 2002, more than doubling our total in 2001. Our MassARRAY system base increased by approximately 60 percent and is now approaching 100 units worldwide.

Approximately $5.6 million, or 18 percent, of our 2002 revenues was derived from genetic service contracts. We anticipate future service revenue in the form of collaboration work with strategic partners in our pharmaceutical unit. The commodity genotyping service marketplace is not a strategic focus for our Company.

Total costs and expenses for the year 2002 were $123.3 million, compared to $100.1 million in 2001. Included in costs and expenses were aggregate impairment and acquisition related charges of $39.8 million in 2002 and $24.9 million in 2001. Our costs and expenses were primarily driven by new product introductions and R&D expenses related to our disease gene discovery efforts.

Our net loss for the year 2002 was $205.7 million, or $5.39 per share, compared to $62.6 million, or $2.25 per share in 2001.



Sales of SEQUENOM's MassARRAY consumable products, including the Company's miniaturized SpectroCHIP bioarray, accounted for approximately $9.3 million in 2002, more than doubling the total for consumables in 2001.

.11.02
□ **Launched MassARRAY-based SNP Discovery Application**

.12.02
□ **Published Method for High-Density Genome Scans**

Excluding $156.7 million of non-cash charges related primarily to the cumulative effect of the adoption of FAS 142, goodwill and long-lived asset impairment and in-process R&D charges in 2002 and an in-process R&D charge in 2001, the net loss in 2002 was $49.0 million, or $1.28 per share, compared to a loss of $37.7 million, or $1.36 per share in 2001.

We finished the year with a cash balance of $102.6 million. We believe we have sufficient cash to execute our programs for a number of years.

BUSINESS STRATEGY

SEQUENOM Genetic Systems. We have expanded potential MassARRAY customer applications to include virtually all types of high-performance DNA analysis. With the addition of our Quantitative Gene Analysis and Re-Sequencing core applications, we believe the market potential for our products has increased from an estimated $200 million in 2002 to more than $1 billion for 2003 and beyond. New applications should allow us to sell systems to a wider potential customer base while increasing consumables sales to our existing customers. We will also add to our hardware product portfolio in 2003. This will include a compact MassARRAY system to address the needs of a large market that requires reference standard data quality without the high throughput capacity of our current MassARRAY system.

SEQUENOM Pharmaceuticals. We are building an effective and efficient genetics-based drug discovery business. Our preferred course toward commercialization in this area is a partnering approach for most of our high-value candidate disease genes. We target large pharmaceutical and biotechnology companies with the appropriate expertise and resources to further advance our candidate disease genes down the path of drug development. Potential collaborations with these companies may involve specific disease targets or may encompass entire disease areas. We also plan to develop a limited number of our functionally validated genetic targets internally to increase their value.

We are proud of where we stand today and believe that our Company is stronger than ever. On behalf of the entire SEQUENOM executive management team, I wish to thank you for your support as we work for continued improvement in our results for 2003.

Stephen L. Zaniboni
Chief Financial Officer

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2002

OR

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

(NO FEE REQUIRED)

For the transition period from _____ to _____.

Commission File Number: 000-29101

SEQUENOM, INC.

(Exact name of Registrant as specified in its charter)

DELAWARE	77-0365889
(State or other jurisdiction or incorporation or organization)	(I.R.S. Employer Identification No.)
3595 John Hopkins Court San Diego, California	92121
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (858) 202-9000

Securities registered pursuant to Section 12(b) of the Act: NONE

Securities registered pursuant to Section 12(g) of the Act: Common Stock, $.001 par value

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) Yes ☒ No ☐ and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K ☐.

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Rule 12b-2 of the Securities Exchange Act of 1934) Yes ☐ No ☒.

The aggregate market value of the voting stock held by non-affiliates of the registrant, based upon the closing sale price of the Common Stock on June 28, 2002 as reported on the Nasdaq National Market, was approximately $130,410,000. Shares of Common Stock held by each executive officer and director and by each person who owns 10% or more of the outstanding Common Stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 28, 2003, there were 39,448,382 shares of the Registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Items 10, 11, 12 and 13 of Part III incorporate by reference information from the registrant's definitive proxy statement to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for the registrant's Annual Meeting of Stockholders to be held on May 30, 2003.

SEQUENOM, INC.
FORM 10-K
For the Fiscal Year Ended December 31, 2002

INDEX

PART I

Item 1. BUSINESS

All statements in this report that are not historical are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act, including statements regarding our "expectations," "beliefs," "hopes," "goals," "intentions," "anticipations," "plans," "strategies," "should" or the like. Such statements are based on management's current expectations and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. We caution investors that there can be no assurance that actual results or business conditions will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors, including, but not limited to, the risk factors discussed in this report. Our expectations and the events, conditions, and circumstances on which these future forward-looking statements are based, may change.

SEQUENOM, MassARRAY, RealSNP and SpectroCHIP are trademarks of SEQUENOM, Inc. This report also refers to trade names and trademarks of other organizations.

Overview

SEQUENOM was incorporated in 1994 under the laws of the state of Delaware. SEQUENOM is a leading genetics company organized into two distinct business units: SEQUENOM Genetic Systems and SEQUENOM Pharmaceuticals. The two business units combine to capitalize on our high performance DNA analysis platform, SNP assay portfolio, disease gene discovery programs and extensive DNA sample repository. SEQUENOM Genetic Systems is dedicated to the sales and support of our MassARRAY DNA analysis products and the continued expansion of platform applications. SEQUENOM Pharmaceuticals applies the power of human genetics to systematically identify disease-related genes that affect significant portions of the overall population. The pharmaceutical unit focuses on disease gene discovery, target identification, functional validation and ultimately diagnostic and therapeutic product development.

Financial information related to each of our busness units is presented in Note 2 to the Consolidated Financial Statements. A summary of domestic and foreign revenue from the sale of products and services is detailed in Note 10 to the Consolidated Financial Statements.

SEQUENOM Genetic Systems

SEQUENOM Genetic Systems derives revenue primarily from sales of our MassARRAY hardware and software products and consumables, including our miniaturized SpectroCHIP bioarray. Until the latter part of 2002, our MassARRAY platform primarily supported one core application, High-Performance Genotyping. Genotyping is the analysis of single nucleotide polymorphisms, or SNPs, the most common form of genetic variation. We have successfully penetrated this market and are now recognized as a leader for data quality. In 2002, we expanded the potential of our platform to include virtually any type of high-performance DNA analysis, with the exception of *de novo* sequencing. We launched two new core applications: Quantitative Gene Analysis and Re-Sequencing. The new core applications enable a number of new customer applications, including Allele Frequency Analysis, Gene Expression Analysis and SNP Discovery. We believe that the expanded application base has significantly increased the addressable market for our MassARRAY products.

In addition to our new applications, other milestones and accomplishments for our genetic systems unit in 2002 included:

- *Increased Demand for MassARRAY Technology.* We raised our installed base of MassARRAY systems at customer sites worldwide by approximately 60 percent in 2002. We also added a number of leading genetic research institutions to our list of customers, including the Stanford Human Genome Center and the Institute for Systems Biology.

- *Continued Support from High Profile Customers.* Our repeat customers in 2002 included the National Institutes of Health, the Whitehead Institute, Samsung, Hitachi and GlaxoSmithKline.

- *Expanded MassARRAY Product Line.* We launched two new hardware products in 2002, the MassARRAY 20K system and the MassARRAY Nanodispenser. The MassARRAY 20K system is designed for complete automation of up to 20,000 analytical reactions per day. The MassARRAY Nanodispenser has the capacity to nearly double the throughput levels of currently available liquid transfer systems. Both products increase the speed and efficiency of large-scale genetics studies.

- *Established Asia-Pacific Office.* We established an Asia-Pacific office in 2002 to support our growing base of customers in the region. The office is located in Brisbane at the Queensland Institute of Medical Research, one of Australia's largest medical research facilities and a SEQUENOM customer.

Products & Applications

We have commercialized a suite of products and applications to accelerate and improve virtually every stage of high-performance DNA analysis. The MassARRAY system is the cornerstone of this business, enabling large-scale and cost-effective genetics studies. Compared to other DNA analysis platforms, the MassARRAY system offers a number of distinct functional advantages, such as sample pooling (pooling hundreds of DNA samples into a single assay) and multiplexing (testing for multiple SNPs in one sample).

The standard MassARRAY system combines proprietary enzymatic reactions, a miniaturized SpectroCHIP bioarray, and highly sophisticated bioinformatics software with the proven method of MALDI-TOF (Matrix Assisted Laser Desorption/Ionization-Time-Of Flight) mass spectrometry. System hardware typically includes a liquid handling device for high-throughput sample preparation, a nano-liter dispensing unit for transfer from microplates to the SpectroCHIP bioarray, a MALDI-TOF mass spectrometer, and a bioinformatics workstation incorporating proprietary software. In addition to the hardware and software, the MassARRAY system uses consumable components, including proprietary SpectroCHIP bioarrays and reagents needed for the enzymatic reactions. Each of these components contributes to a higher level of performance in terms of speed, accuracy and cost efficiency.

- *Core Application: High-Performance Genotyping.* Our standard MassARRAY system is widely accepted as the most powerful high-throughput, high-performance genotyping platform of its kind. The power of our MassARRAY technology resides in its ability to rapidly distinguish genetic variations with a high level of precision and sensitivity.

Over the past year we have enlarged our hardware product offering and developed additional core applications and sophisticated software to enable high performance DNA analysis for many additional applications, addressing a broad range of customer needs. The principal developments include:

- *MassARRAY 20K System.* Our MassARRAY 20K system integrates and automates all the steps involved in DNA sample preparation, which are performed separately in our standard system. This integration, automation, and other improvements, increase throughput, processing up to 20,000 genotyping reactions in a 12-hour period while using some of the lowest reaction volumes in the industry, resulting in time and cost savings.

- *MassARRAY Nanodispenser.* Our compact MassARRAY Nanodispenser has the capacity to nearly double the throughput of our previous liquid transfer system.
- *Core Application: Quantitative Gene Analysis.* Capitalizing on the inherent data quality of MALDI-TOF mass spectrometry, we introduced Quantitative Gene Analysis as our second core application for our MassARRAY platform. Allele Frequency Analysis, or SNP analysis in sample pools, was the first customer application of Quantitative Gene Analysis, followed by Gene Expression Analysis. Other potential customer applications include strain-specific viral load determination, gene copy number determination, loss of heterozygosity in cancer and vaccine quality control. Quantitative Gene Analysis is available through a software and bioinformatics package that can be purchased as an add-on to our standard MassARRAY system using a specially designed SpectroCHIP bioarray.
  - *Allele Frequency Analysis.* Allele Frequency Analysis enables users to determine the frequency of a SNP in a population by quantitatively pooling hundreds of DNA samples into a single assay. This allows our customers to screen SNPs within large patient pools before including them in individual genotyping analysis, which can reduce the cost of such projects by up to 90 percent. This provides significant cost and throughput advantages over conventional technologies when doing large, complex genetic studies in general populations. Our pharmaceutical business unit routinely uses Allele Frequency Analysis in our internal discovery genetics programs, and its performance has been independently validated in a number of peer-reviewed journals.
  - *Gene Expression Analysis.* Our latest high-performance DNA analysis customer application, Gene Expression Analysis, combines our existing MassARRAY system and Quantitative Gene Analysis software in a proprietary process that enables precise and accurate measurements of the expression of specific genes. This is done on a scalable throughput level. Due to the inherent advantages of our MassARRAY technology, relative and absolute numbers of target molecules can be determined independent of the number of DNA amplification cycles. An article describing this novel method was published in the *Proceedings of the National Academy of Sciences.*
- *Core Application: Re-Sequencing.* Re-Sequencing, our third MassARRAY technology based core application, is an effective method for rapidly comparing a target DNA sequence with a reference DNA sequence to identify differences. This method can be used, for example, to discover the large number of SNPs present in the general population for most genes. Re-Sequencing has a demonstrated capacity to accurately scan up to three million bases of DNA sequence per MassARRAY platform per day. Targeted SNP Discovery is the first of several potential customer applications for Re-Sequencing, including DNA methylation analysis, bacterial and viral typing, mutation analysis and species identification. Re-Sequencing is available through a software and bioinformatics upgrade to our standard MassARRAY system. The application also utilizes the SpectroCHIP bioarray modified with proprietary components for the unique enzymatic process.
  - *Targeted SNP Discovery.* Using the precision, accuracy and resolution of MassARRAY MALDI-TOF mass spectrometry, Targeted SNP Discovery enables users to detect and locate previously unknown SNPs, the most common form of genetic variation, with greater accuracy and speed than competing technologies. Initial studies using this application rapidly discovered up to 30 percent more SNPs than were available in all public databases for even the most heavily researched genes.

Sales and Marketing

SEQUENOM Genetic Systems focuses on the supply of MassARRAY systems, software and high-yield consumables to premier research centers. Market segments include academic centers, biotechnology companies, and diagnostic and pharmaceutical companies. To maximize market penetration and provide customer support for our expanding base of users, we have established direct sales and support operations in the United States, Europe and Asia. To complement our direct sales activities in Asia, we have also developed a network of regional high quality distribution partners.

Business Strategy – SEQUENOM Genetic Systems

MassARRAY product related revenues represented approximately $24.8, $21.5 and $8.3 million or 81%, 70% and 82% of our revenues during the years ended December 31, 2002, 2001 and 2000, respectively, while approximately $5.6 million, $8.9 million and $1.4 million or 18%, 29% and 14% of our revenues during the years ended December 31, 2002, 2001 and 2000, were derived from SNP validation services. Incyte Pharmaceuticals, a research and collaboration and services partner of ours, represented $5.0 million and $4.1 million or 16% and 13% of our revenues during the years ended December 31, 2002 and 2001, respectively. These revenues were derived from validation service contracts that have been completed. The service revenue marketplace is competitive and we do not anticipate significant revenue from this area in the short-term, if at all.

With the addition of our Quantitative Gene Analysis and Re-Sequencing core applications to our Genotyping core application, potential downstream customer applications have grown to include virtually all types of high performance DNA analysis. In general, customer applications will be supported by our already available systems and proprietary SpectroCHIP bioarrays. We will not have to develop additional hardware for new applications, and plan to publish application notes to communicate methods for using the MassARRAY system for each new application as it is developed internally or in conjunction with our customers. We believe that this open system approach will enable us to get valuable applications to customers more quickly and should facilitate additional application development by MassARRAY systems users. As we add new applications we expect to be able to sell systems to a wider potential customer base while increasing consumables usage by our existing customers using these new applications.

We also plan to make strategic additions to our hardware offerings. In 2003, we expect to launch a proprietary rapid thermal cycler developed from the technology used in our MassARRAY 20K system. This thermal cycler has significant advantages over other systems currently available — including speed, resulting purity and flexibility. We also expect to launch a medium-throughput, medium-cost desktop MassARRAY system to address the needs of customers that do not require the throughput levels of our standard system but require the precision and sensitivity of our MassARRAY technology. Each of these new products in development is consistent with and builds upon our strategy of providing an open platform for high performance DNA analysis and developing a wide variety of applications for that platform.

SEQUENOM Pharmaceuticals

SEQUENOM Pharmaceuticals has developed what we believe is the industry's most comprehensive genetic discovery and target validation process. It is based on the application of our advanced genetic discovery approach to elucidate disease genes that are then validated and characterized in human cell lines. We carry out our genetic discovery efforts by applying our advanced genetic discovery tools to DNA samples from our proprietary sample populations of both diseased and healthy individuals. Further development and validation of genetically identified targets is carried out in an array of human cell lines with a unique set of cell assay screening technologies.

In 2002, we completed eight high-resolution scans of the human genome. The first scan used our healthy population DNA bank to identify genes with a general impact on human health. Approximately 100,000 validated SNP assays were measured across the DNA of 1,500 individuals, with several high-confidence targets identified. Similarly, we completed full genome scans in melanoma, breast cancer, HDL-cholesterol, osteoarthritis, schizophrenia, lung cancer and type II diabetes populations, typically using approximately 28,000 SNP markers across the DNA of 1,000 individuals. These scans are yielding encouraging portfolios of potential disease-related genes.

In addition to completion of these scans, other milestones for our pharmaceutical unit in 2002 included:

- *Validated Genetic Targets.* We completed genetic validation of targets from several of our high-resolution scans in 2002. We discovered that potential commercially feasible targets are often within defined and characterized protein families and pathways, making them amenable to rapid drug development. We believe that the increased quality of such validated drug targets should significantly improve the cost-efficiency, speed and success of drug development.
- *Launched Genome-Wide Marker Sets.* In 2002, we launched our genome-wide marker sets of 28,000, 53,000 and 103,000 SNPs. Our validated marker sets span across the human genome with concentrations in gene-rich regions. The markers were chosen from our collection of more than 220,000 confirmed and validated SNP assays.
- *Published Method for Genome-Wide Scans.* Our method for conducting high-density genome-wide scans was published in the *Proceedings of the National Academy of Sciences* in December 2002. The findings demonstrated the proof of concept for using pooled DNA with our MassARRAY technology as a method for discovering disease-related variations in the human genome. Dr. Francis Collins' group at the NIH independently validated this technique and published an article in the same issue of *PNAS*.
- *Established Internal Biology, Assay and Drug Discovery Capabilities.* We established internal biology, assay and drug discovery capabilities in 2002 through our acquisition of Axiom Biotechnologies, a privately held biotechnology company. These capabilities have been integrated with our target discovery process and are expected to accelerate functional validation of our targets; a process that we believe should increase the value and utility of our genetic targets.

Disease Gene Discovery Strategy

SEQUENOM Pharmaceuticals' discovery genetics approach entails densely covering gene-rich regions throughout the genome with SNP markers. Our current genome scans use more than 28,000 SNP markers. The DNA of two populations of individuals (for example, individuals with diabetes versus those without) are then compared, or "scanned," at each marker to identify genetic association of the marker with nearby genes. We have shown that this approach can identify disease genes that appear to affect large percentages of the general population. Due to our in-house allelotyping and genotyping capabilities and unique population genetics approach, genome scans can be completed efficiently, with our most recent scans finishing at the rate of approximately one per month.

Our strategy focuses on rapidly identifying a smaller and more manageable set of potential disease-related SNPs than the 28,000 we start with. These SNPs are then rigorously tested and scrutinized by way of repetitive tests in the original population. Subsequently, the tests on a smaller subset of disease association marker candidates are replicated in independent disease collections. Markers shown to have a disease association are further studied to try to determine which gene contains the causative changes. The biological and genetic mechanisms underlying the disease can then be explored.

Genetic targets discovered through this approach will have been discovered in human populations, validated in human populations and subsequently functionally validated in human cell lines. We believe the relevance of these targets for human disease should be high. The significant value of these targets is due in part to the nature of their discovery, which we believe is more applicable to the process of human drug discovery than conventional approaches. We believe that the increased quality of such validated targets should significantly improve the cost-efficiency, speed and success of drug development.

Discovery Genetics Tools

Enabled by our MassARRAY high-performance DNA analysis platform, we are capable of high-throughput genotyping and pooled DNA allele frequency analysis at low costs. Using our unique MassARRAY 200K system, we are able to exploit ultra-high-throughput levels (up to 200,000 individual reactions per day, or 1 million genotypes when optimized for multiplexing) for internal genotyping efforts. We also have a large capacity for a variety of other genetics discovery applications through additional MassARRAY systems and infrastructure. In addition to internal uses, we use these resources to provide DNA analysis and other genetic services on a fee-for-service basis, typically as a part of strategic collaborations.

Other discovery genetics tools used by our pharmaceutical unit include:

- *SNP Assays.* Our collection of SNP assays contains approximately 400,000 validated SNP assays extracted from our database of more than 2 million designed SNP assays. Our 28,000 marker set is a carefully selected and highly polymorphic extraction of 25,000 markers from this group of assays with a bias towards genes and gene-rich regions of the human genome plus 3,000 markers of non-conservative changes within genes. Also, we have constructed even larger 53,000 and 103,000 marker sets for even denser coverage of the genome when desired.
- *DNA Collections.* We have one of the largest single collections of DNA available from diseased and control individuals. This is the raw material that we use with our SNP markers to scan for genes that cause diseases in populations. Through the continued procurement of diseased sample collections, our DNA bank contains approximately 40,000 highly characterized DNA samples in more than 20 disease areas with up to 1,500 phenotypic data points per sample.

Business Strategy – SEQUENOM Pharmaceuticals

Our preferred course toward drug discovery and development is to implement a partnering approach for most of our candidate disease genes. We continue to target large pharmaceutical and biotechnology companies with the appropriate expertise and resources to further advance our candidate disease genes down the path of drug development. Potential collaborations with these companies may involve specific disease targets or may encompass entire disease areas. Deal structures are expected to include upfront and milestone-based payments and/or future royalty payments based on future product sales. We also plan to move forward on internal development of a limited number of our high-value functionally validated genetic targets to increase their value. In addition to these partnering and drug development activities, we will continue to offer advanced DNA analysis and genetic services on a fee-for-service basis, typically as part of a collaboration, to help offset development expenses and amortize the fixed costs of our own programs.

Intellectual Property

To establish and protect our proprietary technologies and products, we rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality provisions in our contracts.

We have implemented an aggressive patent strategy designed to facilitate our research and development projects and facilitate commercialization of our current and future products. Focusing on a global economy, our patent portfolio includes numerous issued patents and pending patent applications in the United States with corresponding foreign counterparts in major industrial nations. Generally, United States patents have a term of 17 years from the date of issue or twenty years from the filing date, whichever is longer, for patents issued from applications filed with the United States Patent Office prior to June 8, 1995, and 20 years from the application filing date or earlier claimed priority date in the case of patents issued from applications filed on or after June 8, 1995. Patents in most other countries have a term of 20 years from the date of filing. The majority of our issued United States patents will expire between 2013 and 2017.

Our success depends to a significant degree upon our ability to continue to develop proprietary products and technologies and identify useful genetic markers and understand their associations. These genetic markers may play a crucial role in the diagnosis and treatment of disease. We intend to continue to file patent applications as we develop new products and DNA analysis technologies, and as we develop diagnostic and therapeutic related applications and products. We also intend to in-license patent rights when appropriate. Patents provide some degree of protection for our intellectual property. However, the assertion of patent protection involves complex legal and factual determinations and is therefore uncertain. The laws governing patentability and the scope of patent coverage continue to evolve, particularly in the areas of genetics and molecular biology that are of interest to us. There can be no assurance that patents will issue from any of our patent applications. The scope of any of our issued patents may not be sufficiently broad to offer meaningful protection. Our issued patents may be successfully challenged, invalidated, circumvented or declared unenforceable so that our patent rights would not create an effective competitive barrier. The laws of some foreign countries may not protect our proprietary rights to the same extent as do the laws of the United States. In view of these factors, our intellectual property positions bear some degree of uncertainty.

We also rely in part on trade secret protection and confidentiality agreements for protection of our intellectual property. We attempt to protect our trade secrets and confidential information by entering into confidentiality agreements with outside parties and with our employees and consultants. Our employees and consultants also sign agreements requiring that they assign to us their intellectual property interests in any work performed for us as a part of their employment and consulting services. All employees sign an agreement not to compete unfairly with us during their employment and upon termination of their employment, through the misuse of confidential information, soliciting employees, soliciting customers, and the like. It is possible that these agreements may be breached or invalidated and if so, there may not be an adequate corrective remedy available. Parties may breach the confidentiality provisions in our contracts or infringe or misappropriate our patents, copyrights, trademarks, trade secrets, confidential information, and other proprietary rights. Outside parties may independently discover or invent competing technologies or reverse engineer our trade secrets or other technology. The measures we are taking to protect our proprietary rights may not be adequate due to factors beyond our control.

Although we are not currently a party to any material intellectual property related legal proceedings, in the future, parties may file claims asserting that our technologies or products infringe on their intellectual property. We cannot predict whether parties will assert such claims against us or against the licensors of technology licensed to us, or whether those claims will harm our business. If we are forced to defend against such claims, whether they are with or without any merit, whether they are resolved in favor of or against us or our licensors, we may face costly litigation and diversion of management's attention and resources. As a result of such disputes, we may have to develop costly

non-infringing technology or enter into licensing agreements. These agreements, if necessary, may be unavailable on terms acceptable to us which could seriously harm our business and financial condition.

Competition

We face competition from various companies offering DNA analysis systems and various companies identifying genes associated with specific diseases as well as developing and commercializing products, services, and intellectual property from these discoveries.

In the DNA analysis marketplace, our MassARRAY system competes with alternative technology platforms that differ in the areas of sample amplification, analysis process, sample separation or method of DNA detection, most of which are based on indirect detection of the molecule by hybridization and/or labeling. Such technologies are offered by: Aclara BioSciences, Inc., Affymetrix, Inc., Amersham Pharmacia Biotech, Applied Biosystems Group, Beckman Coulter, Inc., Caliper Technologies Corporation, High Throughput Genomics, Inc., Illumina, Inc., Luminex Corporation, Nanogen, Inc., Nuvelo, Inc., Orchid BioSciences, Inc., Pyrosequencing AB, Third Wave Technologies, Inc. and others.

Several companies also compete with us by utilizing their technologies in the effort to determine the medical utility of SNPs and genes. These include Celera Genomics Group, CuraGen Corporation, Human Genome Sciences, Inc., deCODE Genetics Inc., Incyte Genomics Inc., Myriad Genetics Inc., Perlegen Sciences and others. Technologies predominantly used by our competitors include gene sequencing, gene sequence variation detection, gene expression analysis, linkage analysis, gene mapping, gene knockout techniques, homology searches and others.

Research and Development

We believe that substantial investment in research and development is essential to establishing a long-term competitive position as a provider of genetic analysis tools and in pharmaceutical target identification and development. Our research and development expenses for the years ended December 31, 2002, 2001, and 2000, were $33.5 million, $29.3 million, and $18.4 million, respectively.

During 2002 we conducted most of our research and development activities at our facilities in the United States and Europe. Our research and devlopment staff is augmented by advisory and collaborative relationships with others.

Our basic research efforts are focused on expanding the applications of our MassARRAY technology, developing related new technologies, expanding our candidate gene portfolio, and target identification and validation. With the completion of our acquisition of Axiom Biotechnologies in August 2002, our research efforts expanded to include development of our candidate disease genes through an array of human cell lines and cell assay screening technologies. During 2002, our research and development resources also focused on the research activities associated with strategic collaborative agreements, validation of products under development, and potential improvements to our existing products. With the formation of our pharmaceutical unit we expanded our research and development efforts to increase focus on disease gene discovery, target identification and validation, and future diagnostic and therapeutic product development.

Government Regulation

Our research and development activities involve the controlled use of hazardous materials and chemicals. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of such materials and chemicals, as well as certain waste products.

Regulation by governmental authorities in the United States and other countries will be a significant factor in the production and marketing of diagnostic and pharmaceutical products that may be developed by us or our corporate partners, collaborators or licensees. The receipt and timing of regulatory approvals for the marketing of such products may have a significant effect on our future revenues. Diagnostic or therapeutic products developed by us or our collaborators will require regulatory approval by governmental agencies prior to commercialization. Human pharmaceutical products are subject to rigorous testing and other approval procedures by the Food and Drug Administration in the United States and similar health authorities in foreign countries. Various federal and state statutes and regulations also govern or influence the manufacturing, safety, labeling, storage, record keeping and marketing of such pharmaceutical products. Obtaining these approvals and the subsequent compliance with these regulations require the expenditure of substantial resources over a significant period of time, and there can be no assurance that any approvals will be granted. Any such delay in obtaining or failure to obtain such approvals could adversely affect our ability to earn sales revenues, royalties or other license-based fees. Current governmental regulations may change as a result of future legislation or administrative action and cannot be predicted.

Employees

As of February 28, 2003, we employed 216 persons, of whom 53 hold PhD or MD degrees and 29 hold other advanced degrees. Our success will depend in large part upon our ability to attract and retain employees. We face competition in this regard from other companies, research and academic institutions, government entities and other organizations. We believe that we maintain good relations with our employees.

Executive Officers

Our executive officers, their positions with us, and their ages as of December 31, 2002 are as follows:

Name	Age	Position
Executive Officers & Directors		
Antonius Schuh, PhD	39	President, Chief Executive Officer and Director
Charles R. Cantor, PhD	60	Chief Scientific Officer and Director
Stephen L. Zaniboni	45	Chief Financial Officer
Andreas Braun, MD, PhD	46	Chief Medical Officer
Richard Episcopo	45	Executive Vice President of Commercial Operations
Jay Lichter, PhD	40	Executive Vice President of Business Development

Antonius Schuh, PhD Dr. Schuh was appointed President, Chief Executive Officer and a member of our board of directors in May 2000. Dr. Schuh joined our German subsidiary as Managing Director in December 1996 and was promoted to Executive Vice President, Business Development and Marketing, in 1998 when he moved to our headquarters in San Diego, California. From 1993 until joining us, Dr. Schuh was with Helm AG, an international pharma/chemical trading and distribution corporation. While at Helm AG, he established and headed the Pharma Business Development Group and the associated technical and regulatory affairs department. Prior to that, from 1992 to 1993, he was with Fisons Pharmaceuticals. Dr. Schuh earned his Ph.D. in pharmaceutical chemistry from the University of Bonn, Germany.

Charles R. Cantor, PhD Dr. Cantor joined us as Chief Scientific Officer and Chairman of the Scientific Advisory Board in 1998. In May 2000, Dr. Cantor was appointed to our board of directors. From 1992 until joining the Company, Dr. Cantor served as the chair of and as a professor in the department of biomedical engineering and Director of the Center for Advanced Biotechnology at Boston University. Prior to that time, Dr. Cantor held positions at Columbia University and the

University of California, Berkeley. He was also Director of the Human Genome Center of the Department of Energy at Lawrence Berkeley Laboratory. Dr. Cantor is a consultant to more than 16 biotech firms, has published more than 350 peer-reviewed articles, and co-authored a three-volume textbook on Biophysical Chemistry. He published the first textbook on genomics entitled, *Genomics: The Science and Technology of the Human Genome Project.* Dr. Cantor earned his Ph.D. from the University of California, Berkeley.

Stephen L. Zaniboni Mr. Zaniboni joined us as our Chief Financial Officer in April 1997. From 1994 until joining us, Mr. Zaniboni served as Vice President, Finance for Aspect Medical Systems, Inc. Prior to joining Aspect, Mr. Zaniboni was Corporate Controller for Behring Diagnostics from 1988 to 1994. Before joining Behring, he held various financial management positions at Boston Scientific Corp. Mr. Zaniboni began his career with Arthur Andersen & Co. He earned his MBA from Boston College, and he is a Certified Public Accountant.

Andreas Braun, MD, PhD Dr. Braun joined us in 1995 and was promoted from Vice President, Genomics to Chief Medical Officer in September 1999. From 1992 until joining us, Dr. Braun served as Deputy Head of the Clinical Laboratory at the Childrens Hospital, University of Munich. His research work in functional pharmacogenomics targeting the human bradykinin receptor was recognized in 1996 with the Garbor Szasz Award, which was granted by the German Society of Clinical Chemistry. Dr. Braun has published more than 60 peer-reviewed scientific publications. Dr. Braun earned doctorate degrees in biology and medical science from the University of Munich.

Richard Episcopo Mr. Episcopo joined us as Senior Vice President of Commercial Operations in July 2000 and has played a key role in the commercial success of the MassARRAY product line. From January 1998 until joining the Company, Mr. Episcopo co-founded Complexions Rx, a medical skin care product and service retailer, where he established several strategic collaborations and was responsible for the development and commercialization of 72 new products over an 18-month period. Prior to founding Complexions Rx, from February 1993 to August 1997, Mr. Episcopo served as Director for ThermoLase Corporation, where he successfully guided the company's key product through the FDA. Mr. Episcopo earned his B.S. in Resources Management from the U.S. Naval Academy in Annapolis, Maryland.

Jay Lichter, PhD Dr. Lichter joined us as Executive Vice President of Business Development in November 2001 to support the licensing of candidate disease genes and collaborations with pharmaceutical companies. Prior to joining us, Dr. Lichter was President and CEO of XenoPharm, Inc., a biotechnology start-up company where he began in February 2001. From September 2000 to February 2001, he was Vice President, Chief Business Officer at 454 Corporation, a subsidiary of Curagen Corporation. Dr. Lichter has also held management positions at Pfizer, Inc. from September 1999 to September 2000, Genset Corporation from January 1998 to August 1999, and was a co-founder of Sequana Therapeutics from 1993 through January 1998. Dr. Lichter received his Ph.D. at the University of Illinois in biochemistry.

Risks and Uncertainties

The following is a summary of the many risks we face in our business. You should carefully read these risks and uncertainties in evaluating our business.

We have a limited operating history.

We are a relatively new company and, for the most part, our technologies, particularly in the pharmaceutical business unit, are still in the early stages of development. For the genetic systems

business unit, we have only recently begun to incorporate our technologies into commercial products and we are also, more recently, commercializing new products. You should evaluate us in the context of the uncertainties and complexities affecting an early stage company developing products for applications in the life science and pharmaceutical industries. We need to make significant investments to ensure our products perform correctly and are cost-effective. We will need to obtain certain regulatory approvals to sell our products for future diagnostic and therapeutic applications. Even if we develop products for commercial use and obtain all necessary regulatory approval, we may not be able to develop products that:

- can be manufactured in sufficient quantities or at a reasonable cost;
- can be marketed successfully;
- are accepted in the genomic, diagnostic, pharmaceutical or other markets;
- meet customers' demands;
- do not infringe the intellectual property rights of others; or
- are protected from competition by others.

We have a history of operating losses, anticipate future losses and may never become profitable.

We have experienced significant operating losses in each period since our inception. At December 31, 2002, our accumulated deficit was approximately $344.7 million. These losses have resulted principally from costs incurred in research and development and from selling, general and administrative costs associated with our operations. We expect to incur operating losses in the future as a result of expenses associated with research and product development, production, marketing and selling, and general and administrative costs as well as costs associated with consolidating and completing the integration of Gemini Genomics and Axiom Biotechnologies, into our business, and any other business that we may acquire in the future. Our general and administrative costs are likely to increase as we seek to comply with evolving standards for corporate governance and public disclosure. To achieve profitability, we would need to generate significant additional revenue. It is uncertain when, if ever, we will become profitable as a company, or when, if ever, the genetic Systems or pharmaceutical unit will become profitable, or cash-flow positive. Even if we were to become profitable, we might not be able to sustain or increase profitability on a quarterly or annual basis.

Our operating results may fluctuate significantly.

Our revenues and results of operations may fluctuate significantly, depending on a variety of factors, including the following:

- our ability to enter into and maintain strategic collaborations;
- our success in selling, and changes in the demand for, our products and services;
- the pricing of our products and services;
- variations in the timing of payments from customers and collaborative partners and the recognition of these payments as revenues;
- the timing of any new product or service offerings and demand and acceptance by customers;
- the introduction of new products and services by our competitors;
- changes in the research and development budgets of our customers and collaborative partners;

- changes in the regulatory environment affecting health care and health care providers;
- our progress with research and development, particularly in our Pharmaceuticals business unit;
- our ability to identify candidate disease gene markers that may lead to future therapeutic or diagnostic products;
- the cost and timing of our adoption of new technologies;
- the cost, quality and availability of oligonucleotides, DNA samples, tissue samples, reagents and related components and technologies;
- the cost of integrating and consolidating the operations of Gemini Genomics, Axiom Biotechnologies and any other business that we may acquire in the future into our business;
- our ability to conduct preclinical studies and clinical trials of any potential therapeutic, diagnostic or other products and obtain regulatory approval of any potential products; and
- expenses related to, and the results of, any litigation or other proceedings relating to intellectual property rights, supply contracts or other types of obligations or rights.

Our revenues and operating results are difficult to predict because they depend on the number, timing and type of MassARRAY system placements that we make during the year, the quantity and timing of consumables sales for the installed base of systems, the completion of milestones in service agreements and the duration of and progress made under revenue-generating license agreements and collaborative programs with partners. Delay in generating revenues could cause significant variations in our operating results from year to year and could result in increased operating losses.

We believe that period-to-period comparisons of our financial results will not necessarily be meaningful. You should not rely on these comparisons as an indication of our future performance. If our operating results in any future period fall below the expectations of securities analysts and investors, our stock price will likely fall.

A reduction in revenues from sales of MassARRAY products would harm our business.

A decline in the demand for MassARRAY systems and consumables would reduce our total revenues and harm our business. We expect that sales of MassARRAY systems and consumables will account for a substantial portion of our total revenues for the foreseeable future. The following factors, among others, would reduce the demand for MassARRAY products:

- competition from other products;
- failure of SNPs to demonstrate medical relevance;
- changes in fiscal policies and the economy which negatively impact customers' buying decisions;
- negative publicity or evaluations; or
- intellectual property claims or litigation.

We depend on sales of SpectroCHIP bioarrays and other MassARRAY consumables for a significant portion of our revenues.

Sales of SpectroCHIP bioarrays and other consumables for the MassARRAY system are an important source of revenue. Factors which may limit the use of SpectroCHIP bioarrays and other consumables include:

- the extent of our customers' level of utilization of their MassARRAY systems;
- failure to sell additional MassARRAY systems;
- the training of customer personnel; and
- the acceptance of our technology by our customers.

We may not be able to form and maintain the collaborative relationships that our business strategy requires and such relationships may lead to disputes over technology rights.

We must form research collaborations and licensing arrangements with several collaborators to operate our business successfully. To succeed, we will have to maintain our existing relationships and establish additional collaborations. We cannot be sure that we will be able to establish any additional research collaborations or licensing arrangements necessary to develop and commercialize products using our technology or that we can do so on terms favorable to us. If our collaborations are not successful or we are not able to manage multiple collaborations successfully, our programs will suffer. If we increase the number of collaborations, it will become more difficult to manage the various collaborations successfully and the potential for conflicts among the collaborators will increase.

We may not successfully develop or derive revenues from our genotyping and gene discovery programs.

The Pharmaceuticals business unit's genotyping and gene discovery programs are still in the early stages of implementation, continue to evolve, and may not result in marketable products. We are directing our technology and development focus primarily toward identifying genes that are believed to be responsible for, or indicate the presence of, certain diseases.

We have only identified a limited number of specific candidate genes under our research programs. Our technologies and approach to gene discovery may not enable us to successfully identify the specific genes that cause or predispose individuals to the complex diseases that are the targets of our efforts. The diseases we are targeting are generally believed to be caused by a number of genetic and environmental factors. It may not be possible to address such diseases through gene-based therapeutic or diagnostic products. Even if we are successful in identifying specific genes, our discoveries may not lead to the development of commercial products.

A reduction in revenues from service contracts and collaborations would harm our business.

A decline in the demand for our genetic services or a reduction in the level of such services performed on behalf of collaborators would reduce our total revenues and harm our business. We expect that revenue from service contracts will account for a portion of our total revenues for the foreseeable future. The following factors, among others, may reduce the demand for our services:

- competition from other providers of similar services;
- failure of SNPs to demonstrate medical relevance;

- changes in fiscal policies and the economy which negatively impact customers' buying decisions;
- negative publicity or evaluations;
- intellectual property claims or litigation;
- our ability to secure further collaborations on favorable terms; or
- technological changes rendering our services uncompetitive.

We may need additional capital in the future to support our growth.

Based on our current plans, we believe our cash, cash equivalents and short-term investments will be sufficient to fund our operating expenses, debt obligations and capital requirements at least until 2005. However, the actual amount of funds that we will need will be determined by many factors, some of which are beyond our control, and we may need funds sooner than currently anticipated. These factors include:

- the size of future operating losses;
- our success in selling our MassARRAY systems, consumables, assays and services;
- the extent to which we enter into licensing arrangements, collaborations or joint ventures and generate revenue from the same;
- our progress with research and development, particularly in our Pharmaceuticals business unit;
- our ability to introduce and sell new products and services;
- regulatory changes, competition and technological developments in our markets;
- the extent to which we acquire technologies or businesses;
- our success in consolidating and integrating into our business any business that we may acquire in the future; and
- the level of our expenses associated with litigation.

When we require additional funds, general market conditions or the market price of our common stock may not support capital-raising transactions such as an additional public or private offering of our common stock. If we require additional funds and we are unable to obtain them on a timely basis or on terms favorable to us, we may be required to cease or reduce further commercialization of our products and services, sell some or all of our technology or assets or merge with another entity. If we raise additional funds by selling additional equity, the ownership interest of our stockholders will be diluted.

We and our collaborative partners may not be successful in developing or commercializing therapeutic, diagnostic or other products using our products, services or discoveries.

Development of therapeutic, diagnostic and other products based on our discoveries or our collaborative partners' discoveries will be subject to risks of failure inherent in the development or commercial viability of any such product. These risks include the possibility that such product would:

- be found to be ineffective;
- be found to be toxic;

- fail to receive necessary regulatory approvals;
- be difficult or impossible to manufacture on a commercial scale;
- be uneconomical to market;
- fail to be successfully commercialized if adequate reimbursement from government health administration authorities, private health insurers and other organizations for the costs of these products is unavailable;
- be impossible to market because they infringe on the proprietary rights of third parties or compete with products marketed by third parties that are superior; or
- fail to be developed prior to the successful marketing of similar products by competitors.

If a collaborator or we discover therapeutic, diagnostic or other products using our products, services or discoveries, we may rely on that collaborator for product development, regulatory approval, manufacturing and marketing of those products before we can realize revenue and some of the milestone payments, royalties or other payments we may be entitled to under the terms of our collaboration agreements. If we are unable to successfully achieve milestones or our collaborative partners fail to develop successful products, we will not earn the revenues contemplated. Our collaboration agreements may allow our collaborators significant discretion in electing whether to pursue any of these activities. We cannot control the amount and timing of resources our collaborators may devote to our programs or potential products. As a result, we cannot be certain that our collaborators will choose to develop or commercialize any products or will be successful in doing so. In addition, if a collaborator is involved in a business combination, such as a merger or acquisition, or changes its business focus, its performance in its agreement with us may suffer and, as a result, we may not generate any revenues or only limited revenues from the royalty, milestone and similar payment provisions contained in our agreement with that collaborator.

We may not successfully obtain regulatory approval of any therapeutic, diagnostic or other product which we or our collaborative partners develop.

The Food and Drug Administration, or FDA, must approve any drug product before it can be marketed in the United States. A drug product must also be approved by regulatory agencies of foreign governments before the product can be sold outside the United States. Before a new drug application can be filed with the FDA, the potential product must undergo preclinical testing and clinical trials. Commercialization of any therapeutic, diagnostic or other product that we or our collaborators develop would depend upon successful completion of preclinical testing and clinical trials. Preclinical testing and clinical trials are long, expensive and uncertain processes, and we do not know whether we, or any of our collaborative partners, would be permitted to undertake clinical trials of any potential products. It may take us or our collaborative partners many years to complete any such testing, and failure could occur at any stage. Preliminary results of trials do not necessarily predict final results, and acceptable results in early trials may not be repeated in later trials. A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after promising results in earlier trials. Delays or rejections of potential products may be encountered based on changes in regulatory policy for product approval during the period of product development and regulatory agency review. If our projects reach clinical trials, we or our collaborative partners could decide to discontinue development of any or all of these projects at any time for commercial, scientific or other reasons.

If the medical relevance of SNPs is not demonstrated, we may have less demand for our products and services.

Some of the products we hope to develop involve new and unproven approaches. They are based on the assumption that information about genes may help scientists better understand complex disease processes. Scientists generally have a limited understanding of the role of genes in diseases, and few products based on gene discoveries have been developed. We cannot be certain that genetic information will play a key role in the development of drugs and diagnostics in the future. If we or our customers or collaborators are unable to generate valuable information that can be used to develop these drugs and diagnostics, the demand for our products and services will be reduced and our business will be harmed.

We may not be able to successfully adapt our products for commercial applications.

A number of potential applications of our MassARRAY technology may require significant enhancements in our core technology. If we are unable to complete the development, introduction or scale-up of the manufacturing of any product or genotyping facility, or if any of our new products or applications do not achieve a significant level of market acceptance, our business, financial condition and results of operations could be seriously harmed. We may fail to sustain the market acceptance of our products that have been already established, such as our MassARRAY systems, or of new products and applications. Sustaining or achieving market acceptance will depend on many factors, including demonstrating to customers that our technology is superior to other technologies and products that are available now or that may become available in the future. We believe that our revenue growth and profitability will substantially depend on our ability to overcome significant technological challenges and successfully introduce our newly developed products, applications and services into the marketplace.

If we do not succeed in obtaining development and marketing rights for some of the products developed in collaboration with others, our revenue and profitability could be reduced.

Our business strategy includes, in part, the development of products in collaboration with others, and we intend to obtain commercialization rights to those products. If we are unable to obtain rights to those products, our revenue and profitability could be reduced. To date, we have initiated limited activities towards the exploitation of any commercialization rights or products developed in collaboration with third parties. Even if we obtain commercialization rights, commercialization of products may require resources that we do not currently possess and may not be able to develop or obtain.

Our grants from the government give the government certain license rights to inventions resulting from funded work. Our business could be harmed if the government exercises those rights.

The sales cycle for our products is lengthy, and we may expend substantial funds and management effort with no assurance of successfully selling our products or services.

Our sales cycle is typically lengthy. Our sales effort requires the effective demonstration of the benefits and differentiation of our products and services to and significant training of multiple personnel and departments within a potential customer. We may be required to negotiate agreements containing terms unique to each customer which would lengthen the sales cycle. We may expend substantial funds and management effort with no assurance that we will sell our products or services.

If our customers are unable to adequately prepare samples for our MassARRAY system, the overall market demand for our products would decline.

Before using the MassARRAY system, customers must prepare samples by following several steps that are subject to human error, including DNA isolation and DNA segment amplification. If DNA samples are not prepared appropriately, or the proposed assays are too complex, the MassARRAY system may not generate a reading. If our customers experience these difficulties, they might achieve lower levels of throughput than specified for the system. If our customers are unable to generate expected levels of throughput, they might not continue to purchase our consumables, they could express their discontent with our products to others, or they could collaborate with others to jointly use our products. Any or all of these actions would reduce the overall market demand for our products.

Ethical, privacy or other concerns about the use of genetic information could reduce demand for our products and services.

Genetic testing has raised ethical issues regarding privacy and the appropriate uses of the resulting information. For these reasons, governmental authorities may limit or otherwise regulate the use of genetic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Such concerns may lead individuals to refuse to use genetics tests even if permitted. Any of these scenarios could reduce the potential markets for our products and services, which would seriously harm our business, financial condition and results of operations.

If we do not have adequate access to genetic materials, we will not be able to develop our pharmaceuticals business.

We depend on third parties for the collection of extensive and detailed proprietary clinical data and the collection and storage of large quantities of genetic material, such as DNA, and other biological samples. We need access to normal and diseased human tissue samples and other biological materials and the related clinical and other information to develop our products and services. We may not be able to obtain or maintain access to these materials and information. If the validity of the consents obtained from our volunteers or our collaborators' volunteers were to be challenged, we could lose access to valuable genetic material and information. Government regulation in the United States and foreign countries could result in restricted access to or use of human and other tissue samples. If we were to lose access to sufficient numbers or sources of tissue samples, or if tighter restrictions were to be imposed on our use of the information generated from tissue samples, our business would suffer.

We may not successfully integrate acquired businesses.

We have acquired two companies, Gemini Genomics and Axiom Biotechnologies, and in the future, we may acquire additional businesses or technologies, or enter into other strategic transactions. Managing these acquisitions and any future acquisitions will entail numerous operational and financial risks, including:

- the inability to retain key employees of any acquired businesses or hire enough qualified personnel to staff any new or expanded operations;
- the impairment of relationships with key customers of acquired businesses due to changes in management and ownership of the acquired businesses;

- the inability to sublease on financially acceptable terms excess leased space or terminate lease obligations of acquired businesses that are not necessary or useful for the operation of our business;
- the exposure to federal, state, local and foreign tax liabilities in connection with any acquisition or the integration of any acquired businesses;
- the exposure to unknown liabilities;
- higher than expected acquisition and integration costs that would cause our quarterly and annual operating results to fluctuate;
- increased amortization expenses if an acquisition results in significant goodwill or other intangible assets;
- combining the operations and personnel of acquired businesses with our own, which would be difficult and costly; and
- integrating or completing the development and application of any acquired technologies, which would disrupt our business and divert our management's time and attention.

If the validity of the consents from volunteers were to be challenged, we could be forced to stop using some of our resources, which would hinder our gene discovery programs.

We have attempted to ensure that all clinical data and genetic and other biological samples that we receive from our subsidiaries and our clinical collaborators have been collected from volunteers who have provided our collaborators or us with appropriate consents for the data and samples to be used for purposes which extend to cover our gene discovery programs and other activities. We have attempted to ensure that data and samples that have been collected by our clinical collaborators are provided to us on an anonymous basis. We have also attempted to ensure that the volunteers from whom our data and samples are collected do not retain or have conferred on them any proprietary or commercial rights to the data or samples or any discoveries derived from them. Our clinical collaborators are based in a number of different countries. That our data and samples come from and are collected by entities based in different countries results in complex legal questions regarding the adequacy of consents and the status of genetic material under a large number of different legal systems. The consents obtained in any particular country could be challenged in the future, and those consents could prove invalid, unlawful or otherwise inadequate for our purposes. Any findings against us or our clinical collaborators could deny us access to or force us to stop using some of our clinical or genetic resources which would hinder our gene discovery programs. We could become involved in legal challenges which could consume a substantial proportion of our management and financial resources.

We may not have the resources required to successfully compete in the biotechnology industry.

The biotechnology industry is highly competitive. We expect to compete with a broad range of companies in the United States and other countries that are engaged in the development and production of products, services and strategies to analyze genetic information. They include:

- biotechnology, pharmaceutical, chemical and other companies;
- academic and scientific institutions;
- governmental agencies; and
- public and private research organizations.

Many of our competitors have much greater financial, technical, research, marketing, sales, distribution, service and other resources than we do. Our competitors may offer broader product lines, services and have greater name recognition than we do. Several early stage companies are currently making or developing products that compete with our products. Our competitors may develop or market technologies or products that are more effective or commercially attractive than our current or future products, or that may render our technologies or products obsolete. We may also compete against some of our customers, which would adversely affect our relationships with them.

Our ability to compete in the market may decline if we lose some of our intellectual property rights.

Our success will depend on our ability to obtain and protect patents on our technology and to protect our trade secrets. Our patent applications may not result in the issue of patents in the United States or other countries. Our patents may not afford meaningful protection for our technology and products. Others may challenge our patents, and as a result, our patents could be narrowed or invalidated or become unenforceable. Competitors may develop products similar to ours that do not conflict with our patents. Others may develop products for use with the MassARRAY system in violation of our patents, which could reduce sales of our consumables. To protect or enforce our patent rights, we may initiate interference proceedings, oppositions, or litigation against third parties. These activities would be expensive, take significant time and divert management's attention from other business concerns. The patent position of biotechnology firms generally is highly uncertain, involves complex legal and factual questions, and has recently been the subject of much litigation. No consistent policy has emerged from the U.S. Patent and Trademark Office or the courts regarding the breadth of claims allowed or the degree of protection afforded under biotechnology patents. There is a substantial backlog of biotechnology patent applications at the U.S. Patent and Trademark Office, and the approval or rejection of patent applications may take several years.

Our success will depend partly on our ability to operate without infringing on or misappropriating the proprietary rights of others.

We may be sued for infringing on the patent rights or misappropriating the proprietary rights of others. From time to time, we receive letters from companies regarding their issued patents and patent applications alleging or suggesting possible infringement. Intellectual property litigation is costly, and, even if we prevail, the cost of such litigation would adversely affect our business, financial condition and results of operations. Litigation is also time consuming and would divert management attention and resources away from our operations and other activities. If we were not to prevail in any litigation, in addition to any damages we would have to pay, we could be required to stop the infringing activity or obtain a license. Any required license might not be available to us on acceptable terms. Some licenses might be non-exclusive, and our competitors could have access to the same technology licensed to us. If we were to fail to obtain a required license or were unable to design around a patent, we would be unable to sell some of our products, which would have a material adverse affect on our business, financial condition and results of operations.

The rights we rely upon to protect the intellectual property underlying our products may not be adequate, which could enable third parties to use our technology and reduce our ability to compete with them.

We require our employees, consultants, advisors and collaborators to execute confidentiality agreements. We cannot guarantee that these agreements will provide us with adequate protection against improper use or disclosure of confidential information. In some situations, these agreements may conflict with or be subject to the rights of third parties with whom our employees, consultants,

advisors or collaborators have prior employment or consulting relationships. Others may gain access to our trade secrets or independently develop substantially equivalent proprietary information and techniques.

If we cannot attract and retain highly-skilled personnel, our growth might not proceed as rapidly as we intend.

The success of our business will depend on our ability to identify, attract, hire, train, retain and motivate highly skilled personnel, particularly scientific, medical and technical personnel, for our future success. Competition for highly skilled personnel is intense, and we might not succeed in attracting and retaining these employees. If we cannot attract and retain the personnel we require, we would not be able to expand our business as rapidly as we intend.

If we do not effectively manage our growth, it could affect our ability to pursue opportunities and expand our business.

Growth in our business has placed and may continue to place a significant strain on our personnel, facilities, management systems and resources. We will need to continue to improve our operational and financial systems and managerial controls and procedures and train and manage our workforce. We will have to maintain close coordination among our technical, accounting, marketing, sales and research departments. If we fail to effectively manage our growth and address the above concerns, it could affect our ability to pursue business opportunities and expand our business. We have restructured our business into the Pharmaceuticals and Genetic Systems business units and face additional challenges in effectively managing these units. We may continue to restructure our company and business units which could put additional strain on management and our technical, research, accounting, sales and other departments.

We have limited commercial production capability and experience and may encounter production problems or delays, which could result in lower revenue.

We partially assemble the MassARRAY system and partially manufacture the SpectroCHIP bioarrays and MassARRAY kits. To date, we have only produced these products in moderate quantities. Our customers require that we comply with current good manufacturing practices that we may not be able to meet. We may not be able to maintain acceptable quality standards as we ramp up production. To achieve anticipated customer demand levels, we will need to scale-up our production capability and maintain adequate levels of inventory. We may not be able to produce sufficient quantities to meet market demand. If we cannot achieve the required level and quality of production, we could need to outsource production or rely on licensing and other arrangements with third parties. This reliance could reduce our gross margins and expose us to the risks inherent in relying on others. We might not be able to successfully outsource our production or enter into licensing or other arrangements with these third parties, which would adversely affect our business.

We depend on third-party products and services and limited sources of supply to develop and manufacture our products.

We rely on outside vendors to supply certain products and the components and materials used in our products. Some of these products, components and materials are obtained from a single supplier or a limited group of suppliers. We have experienced quality problems with and delays in receiving wafers used to produce the SpectroCHIP bioarrays, and also had technical difficulties with our pin-tool nanoliter transfer device, which are used with the operation of the MassARRAY system.

Our reliance on outside vendors generally and a sole or a limited group of suppliers in particular involves several risks, including:

- the inability to obtain an adequate supply of required products, components and materials due to capacity constraints, product defects, a discontinuance of a product by a supplier or other supply constraints;
- reduced control over quality and pricing of products, components and materials; and
- delays and long lead times in receiving products, components or materials from vendors.

If we cannot obtain licenses to patented SNPs and genes, we could be prevented from obtaining significant revenue or becoming profitable.

The U.S. Patent and Trademark Office has issued and continues to issue patents claiming SNP and gene discoveries and their related associations and functions. If important SNPs and genes are patented, we will need to obtain rights to those SNPs and genes to develop, use and sell related assays. Required licenses may not be available on commercially acceptable terms. If we were to fail to obtain licenses to important patented SNPs and genes, we might never achieve significant revenue or become profitable.

If we breach any of the terms of our license or supply agreements, the termination of such agreements could result in our loss of access to critical components and could delay or suspend our commercialization efforts.

We have acquired or licensed components of our technology from third parties. Our failure to maintain the right to use these components would seriously harm our business, financial condition and results of operations. Changes to or termination of our agreements with these third parties could result in the loss of access to these aspects of our technology and could delay or suspend our commercialization efforts.

Our revenues are subject to the risks faced by pharmaceutical and biotechnology companies and governmental and other research institutions.

We expect that our revenues in the foreseeable future will be derived primarily from products and services provided to pharmaceutical and biotechnology companies and governmental and other research institutions. Our operating results could fluctuate substantially due to reductions and delays in research and development expenditures by these customers. These reductions and delays could result from factors such as:

- changes in economic conditions and possible country-based boycotts;
- changes in government programs that provide funding;
- changes in the regulatory environment affecting health care and health care providers;
- pricing pressures and reimbursement policies;
- market-driven pressures on companies to consolidate and reduce costs; and
- other factors affecting research and development spending.

None of these factors is within our control.

We are subject to risks associated with our foreign operations.

As a result of our acquisition of Gemini Genomics, we are subject to the increased risks of doing business abroad.

We expect that a significant portion of our sales will be made outside the United States. A successful international effort will require us to develop relationships with international customers and collaborators. We may not be able to identify, attract or retain suitable international customers or collaborators. Expansion into international markets will require us to establish and grow foreign operations, hire additional personnel to run these operations and maintain good relations with our foreign customers and collaborators. International operations involve a number of risks not typically present in domestic operations, including:

- currency fluctuation risks;
- changes in regulatory requirements;
- costs and risks of deploying systems in foreign countries;
- licenses, tariffs and other trade barriers;
- political and economic instability and possible country-based boycotts;
- difficulties in staffing and managing foreign operations;
- potentially adverse tax consequences;
- the burden of complying with a wide variety of complex foreign laws and treaties; and
- different rules, regulations, and policies governing intellectual property protection and enforcement.

Our international operations are also subject to the risks associated with the imposition of legislation and regulations relating to the import or export of high technology products. We cannot predict whether tariffs or restrictions upon the importation or exportation of our products will be implemented by the United States or other countries.

If our production and laboratory facilities are damaged, our business would be seriously harmed.

Our only production facility is located in San Diego, California. We have laboratories located in California. Damage to our facilities due to war, fire, natural disaster, power loss, communications failure, terrorism, unauthorized entry or other events could prevent us from conducting our business for an indefinite period, could result in a loss of important data or cause us to cease development and production of our products. We cannot be certain that our limited insurance to protect against business interruption would be adequate or would continue to be available to us on commercially reasonable terms, or at all.

Responding to claims relating to improper handling, storage or disposal of hazardous chemicals and radioactive and biological materials which we use, could be time consuming and costly.

We use controlled hazardous and radioactive materials in the conduct of our business. The risk of accidental contamination or injury from these materials cannot be completely eliminated. If an accident with these substances occurs, we could be liable for any damages that result, which could seriously harm our business. Additionally, an accident could damage our research and manufacturing facilities and operations, resulting in delays and increased costs. Such damage and any expense resulting from delays, disruptions or any claims may not be covered by our insurance policies.

We may not have adequate insurance if we become subject to product liability or other claims.

Our business exposes us to potential product liability and other types of claims. Any claim in excess of our insurance coverage would have to be paid out of our cash reserves, which would have a detrimental effect on our financial condition. It is difficult to determine whether we have obtained sufficient insurance to cover potential claims. Also, we cannot assure you that we can or will maintain our insurance policies on commercially acceptable terms, or at all.

Compliance with changing corporate governance and public disclosure regulations may result in additional expenses.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and Nasdaq Stock Market rules, are creating uncertainty for companies such as ours. To maintain high standards of corporate governance and public disclosure, we intend to invest all reasonably necessary resources to comply with evolving standards. This investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities.

Our stock price has been and may continue to be volatile, and your investment could suffer a decline in value.

The trading price of our common stock has been volatile and could be subject to wide fluctuations in price in response to various factors, many of which are beyond our control, including:

- actual or anticipated variations in quarterly and annual operating results;
- announcements of technological innovations by us or our competitors;
- developments or disputes concerning patent or proprietary rights; and
- general market conditions out of our control.

The stock market in general, and the Nasdaq National Market and the market for life sciences companies in particular, have experienced extreme price drops and volume fluctuations that may have been unrelated or disproportionate to the operating performance of the listed companies. There has been dramatic declines in the market prices of securities of biotechnology and pharmaceutical companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. Sharp drops in the market price of our common stock expose us to securities class-action litigation. Such litigation could result in substantial costs and a diversion of management's attention and resources, which would seriously harm our business, financial condition and results of operations. The Nasdaq National Market imposes, among other requirements, listing maintenance standards as well as minimum bid and public float requirements. During 2002, the closing price of our common stock fell to a low of $1.31 per share. If the closing bid price of our common stock falls below $1.00 per share for thirty consecutive trading days, Nasdaq may choose to delist our common stock from the Nasdaq National Market. If the stock were delisted, the ability of our shareholders to sell their common stock would be negatively affected.

We have adopted anti-takeover provisions that may limit the ability of another party to acquire us and that could cause our stock price to decline.

Various provisions of our certificate of incorporation and bylaws and Delaware law may discourage or prevent a third party from acquiring us, even if doing so would benefit our stockholders. These provisions provide for, among other things, a classified board of directors, by which approximately

one third of the directors are elected each year, advance notice requirements for proposals that can be acted upon at stockholder meetings and limitations on who may call stockholder meetings. In October 2001, we adopted a stockholder rights plan. Pursuant to our stockholders rights plan, each share of our outstanding common stock has an associated preferred share purchase right. The rights will not trade separately from our common stock until, and are exercisable only upon, the acquisition or potential acquisition by a person or group of or the tender offer for 15% or more of our common stock. As a result of these provisions, we could delay, deter or prevent a takeover attempt or third party acquisition that our stockholders consider to be in their best interests, including a takeover attempt that results in the payment of a premium for our common stock. Our board of directors, without further approval of the stockholders, is authorized to issue "blank check" preferred stock and to fix the dividend rights and terms, conversion rights, voting rights, redemption rights and terms, liquidation preferences and any other rights, preferences, privileges and restrictions applicable to this preferred stock. The issuance of preferred stock could adversely affect the voting power of the holders of our common stock, making it more difficult for a third party to gain control of us, discouraging premium bids for our common stock or otherwise adversely affecting the market price of our common stock.

Available Information

Copies of our public filings are available on our Internet website at http://www.sequenom.com as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

Item 2. PROPERTIES

We are headquartered in San Diego with wholly owned subsidiaries located in Hamburg, Germany, Cambridge, England and also have offices in Queensland, Australia and in Newton and Sudbury, Massachusetts. Collectively, we lease approximately 132,000 square feet under leases that expire from May 2003 to December 2015, each of which contains laboratory, office, manufacturing, or storage facilities. The locations are:

San Diego, California (utilized by both genetic systems and pharmaceutical business units)
Newton, Massachusetts (surplus space)
Sudbury, Massachusetts (utilized by genetic systems)
Hamburg, Germany (utilized by genetic systems)
Cambridge, England (utilized by both genetic systems and pharmaceutical business units)
Queensland, Australia (utilized by genetic systems)

The San Diego site is company headquarters and houses our selling, general and administrative offices, research and development facilities and manufacturing operations. The sites in Hamburg and Sudbury are used to support sales and distribution in Europe and the East Coast of the United States, respectively. The Newton site was acquired through our merger with Gemini Genomics in 2001 and is partially subleased. The site in Cambridge is used as our U.K. headquarters for sales and support activities performed in the U.K.. We expect that it may take us from six months to one year, or possibly longer, to sublease the remaining identified surplus space in Newton, Massachusetts. Excluding the identified surplus space, we believe our facilities are adequate for our current needs and that suitable additional or alternative space will be available in the future on commercially reasonable terms as needed.

Item 3. LEGAL PROCEEDINGS

In November 2001, we and certain of our current or former officers and directors were named as defendants in a class action shareholder complaint filed by Collegeware USA in the U.S. District Court for the Southern District of New York (Case No. 01-CV-10831). Similar complaints were filed in the same Court against hundreds of other public companies that conducted initial public offerings of their common stock in the late 1990s and 2000. In the complaint, the plaintiffs allege that our underwriters, certain of our officers and directors and we violated the federal securities laws because our registration statement and prospectus contained untrue statements of material fact or omitted material facts regarding the compensation to be received by and the stock allocation practices of the underwriters. The plaintiffs seek unspecified monetary damages and other relief. In October 2002, our officers and directors were dismissed without prejudice pursuant to a stipulated dismissal and tolling agreement with the plaintiffs. In February 2003, the Court dismissed the claim against us brought under Section 10(b) of the Securities Exchange Act of 1934, without giving the plaintiffs leave to amend the complaint with respect to that claim. The Court, however, declined to dismiss the claim against us brought under Section 11 of the Securities Act of 1933. We deny all material allegations and intend to defend against the remaining claim vigorously.

In addition, from time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business.

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matter was submitted to a vote of security holders during the fourth quarter of 2002.

PART II

Item 5. MARKET PRICE OF REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

(a) Our common stock is traded on the Nasdaq National Market (the "NNM") under the symbol "SQNM". The following tables set forth the high and low sale prices, for the Company's common stock as reported on the NNM for the periods indicated.

	High	Low
Year Ended December 31, 2002:		
Fourth Quarter	$ 2.55	$1.31
Third Quarter	2.99	1.54
Second Quarter	6.95	3.17
First Quarter	10.30	5.35
Year Ended December 31, 2001:		
Fourth Quarter	16.02	11.18
Third Quarter	12.37	5.72
Second Quarter	18.11	8.66
First Quarter	20.75	8.00

There were approximately 403 holders of record of our common stock as of February 28, 2003. We have not paid any cash dividends to date and do not anticipate any being paid in the foreseeable future.

(b) On January 31, 2000, the Company's Form S-1 registration statement (File No. 333-91665) was declared effective by the Securities and Exchange Commission. The registration statement, as amended, covered the offering of 5,250,000 shares of common stock. The offering commenced on January 31, 2000 and the sale to the public of shares of common stock at $26.00 per share was completed on February 3, 2000 for an aggregate price of approximately $136.5 million. The registration statement covered an additional 787,500 shares of common stock that the underwriters had the option to purchase solely to cover over-allotments. These shares were purchased on February 2, 2000 at $26.00 per share for an aggregate price of approximately $20.5 million. The managing underwriters for the offering were Warburg Dillon Read LLC, FleetBoston Robertson Stephens Inc. and SG Cowen Securities Corporation. Expenses incurred in connection with the issuance and distribution of common stock in the offering included underwriting discounts, commissions and allowances of approximately $11.0 million and other expenses of approximately $1.9 million, resulting in net offering proceeds to the Company of approximately $144.1 million. No payments or expenses were paid to directors, officers or affiliates of the Company or 10% owners of any class of equity securities of the Company. Of the net offering proceeds, through December 31, 2002, approximately $7.4 million has been used to payoff long-term and other debt, approximately $31.3 million to purchase equipment, intangible assets or make leasehold improvements, approximately $13.1 million related to the acquisition of Gemini Genomics, and approximately $83.9 million for general corporate purposes, including hiring additional personnel, expansion of facilities, development and manufacturing of products, and expenses for filing and pursuing patent applications. The balance is invested in a variety of interest-bearing instruments including investment-grade corporate bonds, commercial paper and money market accounts.

Item 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data is derived from our audited financial statements and should be read in conjunction with the consolidated financial statements and the notes to such statements and "Management's discussion and analysis of financial condition and results of operations" included elsewhere in this report. Historical results are not necessarily indicative of the results to be expected in the future.

	Years ended December 31,				
	2002	2001	2000	1999	1998
	(In thousands, except per share data)				
Consolidated statements of operations data					
Revenues:					
Product	$ 24,868	$ 21,524	$ 8,253	$ –	$ –
Services	5,646	8,942	1,447	–	–
Research	371	269	337	179	351
Total revenues	30,885	30,735	10,037	179	351
Costs and expenses:					
Cost of product and service revenue	17,474	19,780	6,574	–	–
Research and development	33,451	29,327	18,433	10,291	6,188
Selling, general and administrative	28,464	24,167	18,492	8,239	4,218
Impairment of assets and goodwill	33,126	–	–	–	–
In process research and development	3,668	24,920	–	–	–
Integration costs	3,000	–	–	–	–
Amortization of acquired intangibles	3,734	935			
Amortization of deferred stock compensation	418	939	3,741	4,376	–
Total costs and expenses	123,335	100,068	47,240	22,906	10,406
Loss from operations	(92,450)	(69,333)	(37,203)	(22,727)	(10,055)
Other income (expense):					
Interest income	3,865	6,796	8,925	1,578	397
Interest expense	(408)	(343)	(4,683)	(790)	(613)
Equity share of loss in investee	(1,000)	–	–	–	–
Other (expense) income, net	(63)	248	75	169	–
Loss before income taxes and cumulative effect of accounting change	(90,056)	(62,632)	(32,886)	(21,770)	(10,271)
Deferred income tax benefit	1,309	–	–	–	–
Net loss before cumulative effect of accounting change	(88,747)	(62,632)	(32,886)	(21,770)	(10,271)
Cumulative effect of accounting change	(116,947)	–	–	–	–
Net loss	$(205,694)	$(62,632)	$(32,886)	$(21,770)	$(10,271)
Net loss per share, basic and diluted:					
Before cumulative effect of accounting change	$ (2.32)	$ (2.25)	$ (1.46)	$ (26.23)	$(33.33)
Cumulative effect of accounting change	$ (3.07)	–	–	–	–
Net loss per share, basic and diluted	$ (5.39)	$ (2.25)	$ (1.46)	$ (26.23)	$(33.33)
Shares used in computing net loss per share, basic and diluted	38,150	27,816	22,454	830	308

	As of December 31,				
	2002	2001[1]	2000	1999	1998
Consolidated balance sheet data					
Cash, cash equivalents, short-term investments and restricted cash	$102,550	$143,135	$138,424	$21,616	$28,497
Working capital	85,370	126,648	134,519	18,518	26,014
Total assets	152,608	356,381	166,262	29,753	32,777
Total long-term obligations	9,742	2,842	1,827	7,326	7,408
Total stockholders' equity	108,249	308,602	144,939	17,539	22,635

(1) 2001 includes the results of operations of Gemini Genomics from September 20, 2001, the date of acquisition, and affects the comparability of the Selected Financial Data.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

All statements in this Form 10-K that are not historical are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding our "anticipation," "expectations," "beliefs," "hopes," "anticipations," "plans," "goals," "intentions," "strategies," "should" or the like. Such statements are based on management's current expectations and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. We caution investors that there can be no assurance that actual results or business conditions will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors, including, but not limited to, the risk factors discussed in Item 1 of this Form 10-K under the caption "Risks and Uncertainties." Our expectations and the events, conditions, and circumstances on which these future forward-looking statements are based, may change.

Overview

We are a leading genetics company organized into two business units (or segments): SEQUENOM Genetic Systems and SEQUENOM Pharmaceuticals. The two business units combine to capitalize on our high-performance DNA analysis platform, SNP assay portfolio, disease gene discovery programs and extensive DNA sample repository.

SEQUENOM Genetic Systems. This business unit includes the sales and support of our MassARRAY hardware, consumables and software product offerings, research and development toward expanding applications of the MassARRAY platform, and the provision of genetic services. Our core technology components include the MassARRAY system for high-performance DNA analysis and a broad portfolio of SNP assays. We commenced sales of our MassARRAY system in January 2000. Through December 31, 2002, we have placed a total of 88 systems with leading companies and institutions. We have sold our products to genetics, pharmacogenetics, diagnostic and agricultural biotechnology companies, as well as leading research institutions, in North America, Europe and Asia. Through December 31, 2002 our product revenues consisted of revenues from the placement of MassARRAY systems, the sales of MassARRAY consumables used with the MassARRAY systems, sales and licensing of proprietary software, and license fees from end-users. Our service revenues consist of genetic validation services, with revenue recognized as phases of projects are completed.

We expect SEQUENOM Genetic Systems to launch new products periodically. The impact of these new products and fluctuations in the level of genetic validation services undertaken

on revenues, margins, expenses and cash flows is uncertain and depends on many factors as described in Item 1 of this Form 10-K and in the section entitled "Risks and Uncertainties."

SEQUENOM Pharmaceuticals. This business unit includes operations relating to disease gene discovery, target identification, functional validation and ultimately diagnostic and therapeutic product development. SEQUENOM Pharmaceuticals applies the power of human genetics to systematically identify potential disease-related genes that affect significant portions of the overall population.

We believe that our technology should enable us to scan virtually every gene in the human genome for association with a given disease, using large sample populations. Using our technology internally and in partnerships, we are generating a portfolio of candidate disease gene markers associated with significant human health disorders, including cardiovascular disease, cancer, diabetes, and obesity. By focusing on disease genes with a broad population impact, we expect to play an important role in bringing new therapeutic and diagnostic products to market while maximizing the return on their development.

In 2002, we completed eight high-resolution genetic scans of the human genome. The first scan used our healthy population DNA bank to identify genes with a general impact on human health. Approximately 100,000 validated SNP assays were measured across 1,500 individuals, with several high-confidence targets identified. Similarly, we completed full genome scans in melanoma, breast cancer, HDL-cholesterol, osteoarthritis, schizophrenia, lung cancer and type II diabetes populations, typically using approximately 28,000 SNP markers across 1,000 individuals. These scans are yielding encouraging portfolios of potential disease-related genes. We intend to investigate the genes discovered further in an effort to ultimately produce therapeutic and diagnostic products.

Revenues may fluctuate significantly as the revenues will initially be based upon licensing of genes and related information and the timing of milestone payments and licensing, and ultimately on diagnostic and therapeutic product sales which is difficult to predict. To reach the ultimate goal of diagnostic and therapeutic product sales, significant amounts will need to be invested in research and development efforts over several years. The timing and impact of revenues and expenses is uncertain and depends on many factors as described in Item 1 of this Form 10-K and in the section entitled "Risks and Uncertainties".

Since our inception, we have incurred significant losses. As of December 31, 2002, we had an accumulated deficit of $344.7 million. We expect to incur losses for the foreseeable future as we expand development and commercialization of new products and information-based intellectual property.

Critical Accounting Policies

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions in certain circumstances that affect amounts reported in the accompanying consolidated financial statements and related notes. Certain of these accounting policies that we believe are the most critical to our investors' understanding of our financial results and condition are discussed below. Our significant accounting policies are more fully described in Note 2 to our Consolidated Financial Statements included elsewhere in this report. In preparing these financial statements, management uses its judgment to determine the appropriate assumptions to be used in the determination of certain estimates. The application of these accounting policies involves the exercise of judgment and use of estimates and assumptions as to future uncertainties and, as a result, actual results could differ from these estimates.

Revenue Recognition

In accordance with Staff Accounting Bulleting ("SAB") No. 101, "Revenue Recognition in Financial Statements", revenues are recognized, when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed and determinable and collectibility is reasonably assured. Revenue is deferred for fees received before earned. Revenues from sales of the MassARRAY system and consumables are recognized generally upon shipment and transfer of title to the customer. Revenues from the sale or licensing of our proprietary software are recognized over the duration of the software license or upon transfer of title to the customer. We recognize revenue allocated to maintenance fees for ongoing customer support over the maintenance period. Revenues from SNP validation services are recognized at the completion of key stages in the performance of the service, which is generally delivery of SNP assay information. Grant revenue is recorded as the research expenses relating to the grants are incurred, provided that the amounts received are not refundable if the research is not successful. Amounts received that are refundable if the research is not successful would be recorded as deferred revenue and recognized as revenue upon the grantor's acceptance of the success of the research results.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make certain 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 reporting period. Actual results could differ from those estimates.

Significant estimates are as follows:

- *Accrued acquisition and integration costs.* To the extent that exact amounts are not determinable, we have estimated amounts for direct costs of the acquisition of Gemini Genomics and Axiom Biotechnologies and the related integration costs in accordance with Emerging Issues Task Force ("EITF") 95-3, "Recognition of Liabilities in Connection with a Purchase Business Combination." Accrued acquisition and integration related costs totaled approximately $3.9 million at December 31, 2002 and represented the amount we expect to incur related to facility exit costs. We expect that it may take us from six months to a year or possibly longer to sublease the identified surplus space. Materially different results would be likely if it takes longer than expected to sublease or terminate current lease agreements or if financial terms of subleases or termination of agreements are different than estimated.

- *Impairment of long-lived assets.* We periodically re-evaluate the original assumptions and rationale utilized in the establishment of the carrying value and estimated lives of its long-lived assets. The criteria used for these evaluations include management's estimate of the asset's continuing ability to generate income from operations and positive cash flows in future periods as well as the strategic significance of any intangible assets in our business objectives. If assets are considered to be impaired, the impairment recognized is the amount by which the carrying value of the assets exceeds the fair value of the assets. A total impairment charge of $8.1 million was recognized during the year ended December 31, 2002. Intangible assets, primarily resulting from the acquisition of Gemini Genomics, totaled $14.6 million at December 31, 2002.

- *Valuation of deferred income taxes.* Valuation allowances are established to reduce deferred tax assets to the amounts expected to be realized. The likelihood of a material change in our expected realization of these assets depends on future taxable income, our ability to deduct

tax loss carryforwards against future taxable income, the effectiveness of our tax planning and strategies in the multiple tax jurisdictions where we operate, and any significant changes in the tax treatment received on our business combinations.

New Accounting Pronouncements

In October 2001, the Financial Accounting Standards Board issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 replaces SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of," and provisions of APB Opinion No. 30, "Reporting the Results of Operations - Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions for the disposal of segments of a business and is effective for fiscal years beginning after December 15, 2001. The statement creates one accounting model based on the framework established in SFAS No. 121 to be applied to all long-lived assets including discontinued operations. SFAS No. 144 became effective for us on January 1, 2002. Application of the principles of SFAS No. 144 resulted in a charge of $8.1 million in the year ended December 31, 2002, for various tangible and intangible assets where the carrying value exceeded the expected future revenue from those assets.

In June 2002, the FASB issued SFAS No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." SFAS No. 146 requires recording costs associated with exit or disposal activities at their fair values when a liability has been incurred. Under previous guidance, certain exit costs were accrued upon management's commitment to an exit plan, which is generally before an actual liability has been incurred. Adoption is required at the beginning of fiscal year 2003. SFAS No. 146 will impact the timing of exit or disposal activities reported by us after adoption.

RESULTS OF OPERATIONS

Years ended December 31, 2002, 2001 and 2000

Business segment highlights for the year ended December 31, 2002:

	Year ended December 31, 2002		
($ in thousands)	SEQUENOM Genetic Systems	SEQUENOM Pharmaceuticals	Total
Product sales	$ 24,762	$ 106	$ 24,868
Validation services	5,454	192	5,646
Research	55	316	371
Total revenues	30,271	614	30,885
Cost of product and service revenue	17,141	333	17,474
Research and development	16,234	17,217	33,451
Selling, general and administrative	21,875	6,589	28,464
Impairment of assets and goodwill	1,134	31,992	33,126
In-process research and development	–	3,668	3,668
Integration costs	–	3,000	3,000
Amortization of intangibles	–	3,734	3,734
Amortization of deferred stock compensation	334	84	418
Total costs and expenses	56,718	66,617	123,335
Loss from operations	$(26,447)	$(66,003)	$(92,450)

Prior to 2002 SEQUENOM operated in one business segment making it impracticable to provide separate financial information for SEQUENOM Genetic Systems and SEQUENOM Pharmaceuticals. Management's discussion and analysis compares the total revenues, costs and expenses for the

company in the year ended December 31, 2002 to the same periods in 2001 and 2000. Also, the Company does not currently segregate assets by segment as a significant portion of the Company's total assets are assets commonly used by both segments and cash and cash equivalents which the Company does not assign to its two operating segments. The Company is evaluating the feasibility and usefulness of assigning its other assets to SEQUENOM Genetic Systems and SEQUENOM Pharmaceutical segments and may report assets by segment in the future. Beginning in the quarter ended March 31, 2003, the management discussion and analysis will compare revenues and costs and expenses for both the genetic systems and pharmaceuticals business units.

Revenues

Total revenues increased to $30.9 million in 2002, from $30.7million in 2001 and $10.0 million in 2000.

Product revenues were $24.9 million for the year ended December 31, 2002, increasing from $21.5 million in 2001 and $8.3 million for the year ended December 31, 2000. These product revenues were derived from the sale of MassARRAY systems, consumables including our proprietary SpectroCHIP bioarray, sales and licensing of our proprietary software and license fees from end-users. The increase in product revenue from 2000 to 2001 to 2002 resulted from an increase in the number of systems sold from 2000 to 2002 and the related increase in SpectroCHIP bioarrays and proprietary software revenue. Total systems at customer sites increased from 22 at December 31, 2000 to 55 at December 31, 2001 and 88 at December 31, 2002.

Service revenues were $5.7 million for the year ended December 31, 2002, compared to $8.9 million for 2001 and $1.4 million for 2000. We derived these revenues from the completion of significant phases in genetic validation projects. The commodity service revenue marketplace is competitive and not a strategic focus of our company.

Research revenue was $0.4 million, $0.3 million and $0.3 million for the years ended December 31, 2002, 2001 and 2000, respectively.

We expect that future revenues will be affected by, among other things, customer budgets, new product and application introductions, competitive conditions and government research funding.

Cost of product and service revenue

Total cost of product and service revenues for the years ended December 31, 2002, 2001 and 2000 were $17.5 million, $19.8 million and $6.6 million, respectively. Gross margin as a percentage of sales increased to 43% in 2002 from 35% in 2001 and 32% in 2000. The increase in gross margin resulted primarily from increased volumes and margins from MassARRAY consumables compared to the same periods in 2001 and 2000.

We believe that gross margin in future periods will be affected by, among other things, the mix of products and services sold, competitive conditions, sales volumes, and royalty payments on licensed technologies.

Research and development expenses

Research and development expenses increased to $33.5 million in 2002 from $29.3 million in 2001 and $18.4 million in 2000. These expenses consist primarily of salaries and related personnel costs, materials costs and costs related to our disease-gene discovery programs, improvements to our existing products and validation of products under development. The $4.2 million increase from 2001 to 2002 resulted primarily from an increase in personnel to support our expanded research and development activities in the disease gene discovery programs, our acquisition of Gemini Genomics

in the third quarter of 2001, adding approximately $1.1 million of research and development costs during 2002, as well as our acquisition of Axiom Biotechnologies, adding approximately $0.7 million after the acquisition on August 30, 2002. The $10.9 million increase from 2000 to 2001 resulted from an increase in the number of personnel to support our increased research and development programs, as well as the acquisition of Gemini Genomics in the third quarter of 2001.

Selling, general and administrative expenses

Selling, general and administrative expenses increased to $28.5 million in 2002 from $24.2 million in 2001 and $18.5 million in 2000. These expenses consist primarily of salaries and related costs for sales and marketing, customer support, business development, legal, finance and human resource personnel, and their related expenses. The $4.3 million increase from 2001 to 2002 resulted primarily from additional business development and customer support activities and expenses associated with filing patent applications on our inventions, a $0.7 million increase in expenses over 2001 to support Gemini Genomics' activities following our acquisition in September 2001, and a $0.2 million increase to support Axiom Biotechnologies activities following our acquisition in 2002. The $5.7 million increase from 2000 to 2001 resulted primarily from additional sales, marketing and customer support activities, and expenses associated with filing patent applications on our inventions

Integration costs

The $3.0 million integration charge in 2002 relates to our decision to close our Uppsala, Sweden facility and consisted primarily of the book value of the assets at time of closure. We do not anticipate any additional charges related to the closure of this facility.

In-process research and development

In connection with the acquisition of Axiom Biotechnologies in 2002, we recorded a non-recurring, non-cash in-process research and development charge of $3.7 million.

In connection with the acquisition of Gemini Genomics in 2001, we recorded a non-recurring, non-cash in-process research and development charge of $24.9 million.

Both amounts represents the value of the research and development projects acquired from Axiom Biotechnologies and Gemini Genomics that were not technologically feasible or did not have alternative future uses as of the date of acquisition.

Amortization of acquired intangibles

In connection with the acquisition of Gemini Genomics, we acquired approximately $18.7 million of intangible assets, including clinical data collections and patent rights. In connection with the acquisition of Axiom Biotechnologies, we acquired approximately $0.5 million of intangible assets, including patent rights, human cell banks, and assay technology. These intangible assets will be amortized over three to five years. The 2002 amortization of $3.7 million represents the amortization of the Gemini Genomics intangible assets throughout the year and the amortization of the Axiom Biotechnologies intangible assets from the date of acquisition. The 2001 amortization of approximately $0.9 million represents the amortization of the Gemini Genomics intangible assets from the date of acquisition in September 2001 through the end of 2001.

Impairment of assets and goodwill

Following the adoption of SFAS No. 142, "Goodwill and Other Intangible Assets" we contracted with an independent third party to perform the annual test for impairment of goodwill at October 1, 2002.

As a result of this test, we recognized a non-cash charge of $25.0 million to write off all the remaining goodwill in the SEQUENOM Pharmaceuticals segment arising from the acquisitions of Gemini Genomics and Axiom Biotechnologies. The impairment primarily reflects a decline in long-term market expectations for genomics companies.

In accordance with SFAS No. 144, we examine our tangible and intangible assets when events or changes in circumstances indicate that the carrying value of the long-lived asset might not be recoverable. As a result of this examination, we determined that long-lived assets with a carrying amount of $10.8 million were impaired and wrote them down to their estimated fair value of $2.7 million. Fair value was based on discounted expected future cash flows to be generated by these assets. These assets included licensed intellectual property, prepayments, software acquired as part of the Gemini Genomics acquisition, and fixed assets. An impairment charge of $8.1 million was accordingly recorded for these assets, $7.0 million relating to SEQUENOM Pharmaceuticals and the remaining $1.1 million relating to SEQUENOM Genetic Systems.

Cumulative effect of accounting change

Effective January 1, 2001, we adopted SFAS No. 142, which requires that goodwill and intangible assets deemed to have an indefinite useful life will no longer be amortized but will be reviewed for impairment upon adoption of SFAS No. 142 and annually thereafter. Upon adoption of SFAS No. 142 we recognized a non-cash charge of $116.9 million to reduce the carrying value of its goodwill. The charge is non-operational in nature and is reflected as a cumulative effect of an accounting change in the consolidated statement of operations. In calculating the impairment charge, the fair value of the SEQUENOM Pharmaceuticals segment was estimated using a discounted cash flow methodology, and the charge related entirely to the SEQUENOM Pharmaceuticals segment and the goodwill resulting from the acquisition of Gemini Genomics. We performed our annual impairment review on October 1, 2002 and recognized a non-cash charge of $25.0 million to write off the remaining goodwill from the acquisitions of Gemini Genomics and Axiom Biotechnologies. We plan to continue to perform our reviews on an annual basis.

Under SFAS No. 142, goodwill impairment is deemed to exist if the net book value of a reporting unit exceeds its estimated fair value. No amortization on the goodwill arising as a result of our acquisition of Gemini Genomics in September 2001 was recognized during 2001 in accordance with the transition arrangements in SFAS No. 142. Quarterly results as reported are therefore comparable.

Amortization of deferred stock-based compensation

Deferred stock compensation represents the difference between the estimated fair value of our common stock and the exercise price of options at the date of grant. During the year ended December 31, 2002, we recorded amortization of deferred stock compensation totaling approximately $0.4 million, compared to $0.9 million in 2001 and $3.7 million in 2000. These amounts all relate to stock options granted prior to our initial public offering in January 2000 and are being amortized over the vesting periods of the individual stock options in accordance with FASB Interpretation No. 28. We expect the remaining deferred stock-based compensation of $187,000 to be completely amortized during 2003.

Interest income

Interest income was $3.9 million in 2002, compared to $6.8 million in 2001 and $8.9 million in 2000. The decrease from 2001 to 2002 and from 2000 to 2001 resulted from lower interest rates and lower average balances of interest-bearing investments.

Interest expense

Interest expense was approximately $0.4 million in 2002, compared to approximately $0.3 million in 2001, and approximately $4.7 million in 2000. Interest expense in 2002 and 2001 resulted primarily from interest payments under our capital lease obligations and long-term debt. The interest expense amount in 2000 of $4.7 million was comprised of approximately $4.8 million of non-cash interest expense recorded upon conversion of debt of $2.2 million (4.0 million German deutsche marks exchanged at a rate of 1.84 deutsche marks per 1 US dollar) into common stock and approximately $0.3 million of interest related to capital lease obligations, offset in part by approximately $0.4 million of a non-cash gain recorded upon issuance of common stock to extinguish long-term interest payable.

Income taxes

As required by Statement of Financial Accounting Standards No. 109 (SFAS No. 109), "Accounting for Income Taxes", we recognize tax assets on the balance sheet if it is "more likely than not" that they will be realized on future tax returns. At December 31, 2002, we have provided a full valuation allowance against deferred tax assets of $85.7 million, reflecting uncertainties associated with future profitability.

As of December 31, 2002, we had federal and state tax net operating loss carryforwards of approximately $145.9 million and $48.5 million, respectively. The difference between the federal and state tax loss carryforwards is attributable to the capitalization of research and development expenses for state tax purposes and the limitation on the California loss carryforwards. The federal tax loss carryforwards will begin to expire in 2009, unless previously utilized. Approximately $0.5 million of the state tax loss carryforwards expired in 2002 and the state tax loss carry forwards will continue to expire in 2003 unless previously utilized.

The Company also has German and United Kingdom (UK) net operating loss carryforwards of approximately $11.0 million and $34.0 million, respectively, which may be carried forward indefinitely.

Approximately $32.0 million of the UK net operating loss carryforwards was acquired with the purchase of Gemini Genomics and is fully reserved by the valuation allowance. To the extent these UK net operating loss carryforwards are utilized, such benefit will be recorded as a purchase accounting adjustment.

The deferred tax asset includes a future tax benefit of approximately $0.7 million related to stock option deductions, which, if recognized, will be allocated to additional paid in capital.

The Company also has federal and state research and development tax credit carryforwards of approximately $4.3 million and $3.9 million, respectively. The federal research and development tax credit carryforwards will begin to expire in 2010 unless previously utilized.

Pursuant to Internal Revenue Code Sections 382 and 383, use of the Company's federal net operating loss and credit carryforwards may be limited due to a cumulative change in ownership of more than 50% within a three-year period.

Use of the Company's UK net operating loss carry-forwards may be limited upon the occurrence of certain events such as the discontinuation or change in the nature or conduct of the business.

Liquidity and capital resources

In February 2000, we completed our initial public offering raising net proceeds of approximately $144.1 million. Prior to our IPO, we funded our operations with $55.6 million of private equity financings, $6.0 million in loans and convertible loans and $2.2 million from equipment financing arrangements. As of December 31, 2002 cash, cash equivalents, short-term investments and restricted

cash totaled $102.5 million, compared to $143.1 million at December 31, 2001 and $138.4 million at December 31, 2000. Our cash reserves are held in a variety of interest-bearing instruments, including investment-grade corporate bonds, commercial paper and money market accounts.

Cash used in operations for the year ended December 31, 2002 was $43.2 million compared with $36.2 million in 2001. A net loss of $205.7 million in 2002 was partially offset by non-cash charges, including $116.9 million resulting from the cumulative effect of accounting change upon adoption of SFAS 142, $25.0 million related to goodwill written off as a result of a review required by SFAS 142, $12.6 million for depreciation and amortization expense, $8.1 million related to tangible and intangible asset write-downs under SFAS 144, $3.7 million of in-process research and development resulting from the acquisition of Axiom Biotechnologies, $3.0 million of non-cash accrued integration expenses, and other non-cash items totaling $169.9 million.

Cash used in investing activities was $5.7 million. Investing activities, other than the changes in our short-term investments, restricted cash and the cash acquired from Axiom Biotechnologies, used $5.5 million in cash during 2002 from expenditures for leasehold improvements, computer and laboratory equipment, and acquisition of intangible items and $1.0 million relating to an equity investment in another company.

Cash provided by financing activities was $10.4 million for the year ended December 31, 2002, compared to $0.5 million in the same period in 2001. Financing activities in 2002 included $10.6 million, net of repayments, of proceeds from long term debt, repayments of capital leases of $1.0 million, and $0.8 million of proceeds from Employee Stock Purchase Plan and stock option exercises.

The following table summarized our contractual obligations as of December 31, 2002 ($ in millions):

Contractual obligations	Total	Less Than 1 Year	1-3 Years	After 3 Years
Long-term debt	$14.1	$4.9	$ 9.2	$ –
Capital lease obligations	1.2	0.7	0.5	–
Operating leases	55.9	4.3	8.5	43.1
Total contractual obligations	$71.2	$9.9	$18.2	$43.1

Future operating lease commitments for leases have not been reduced by minimum sublease rentals aggregating $1.9 million.

Other commitments and contingencies that may result in contractual obligations to pay are described in Note 6 to the Consolidated Financial Statements.

We believe our existing cash, cash equivalents and short-term investments will be sufficient to fund our operating expenses, debt obligations and capital requirements through at least the next 12 months. However, the actual amount of funds that we will need during or after the next 12 months will be determined by many factors, some of which are beyond our control, and we may need funds sooner than currently anticipated. These factors include:

- the level of our success in selling our MassARRAY systems, consumables, software, assays and services;
- the level of our sales and marketing expenses;
- the extent to which we enter into collaborations or joint ventures;
- our ability to introduce and sell new products and services;

- our success in developing diagnostic and therapeutic products, alone or in collaboration with our partners, and obtaining any required regulatory approval for those products;
- the level of our acquisition and integration expenses, including tax and other liabilities from the Gemini Genomics, Axiom Biotechnologies or other acquisitions;
- our ability to exit existing excess facilities on terms that are financially acceptable;
- the level of our expenses associated with litigation or termination of agreements;
- the costs and timing of obtaining new patent rights;
- the costs and expenses associated with defending or asserting any intellectual property claims or litigation;
- the extent to which we acquire technologies or companies; and
- regulatory changes and competition and technological developments in the market.

We have a $25.0 million bank line of credit, of which $14.2 million is available for borrowing. We have an asset-backed loan line of $4.0 million, of which $0.4 million is available for borrowing. We have no commitments for any additional financings. When we require additional funds, general market conditions or the then-current market price of our common stock may not support capital raising transactions such as an additional public or private offering of our common stock. If additional funds are required and we are unable to obtain them on a timely basis or on terms favorable to us, we may be required to cease or reduce further commercialization of our products, to sell some or all of our technology or assets or to merge all or a portion of our business with another entity. If we raise additional funds by selling shares of our capital stock, the ownership interest of our stockholders will be diluted.

ITEM 7a. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Short-term investments

The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive from our investments without significantly increasing risk. Some of the securities that we invest in may have market risk. This means that a change in prevailing interest rates may cause the fair value of the principal amount of the investment to fluctuate. For example, if we hold a security that was issued with a fixed interest rate at the then-prevailing rate and the prevailing interest rate later rises, the fair value of the principal amount of our investment will probably decline. To minimize this risk in the future, we intend to maintain our portfolio of cash equivalents and short-term investments in a variety of securities, including commercial paper, money market funds, government and non-government debt securities. The average duration of all of our investments has generally been less than one year. Due to the short-term nature of these investments, we believe we have no material exposure to interest rate risk arising from our investments. Therefore, no quantitative tabular disclosure is provided.

Foreign currency rate fluctuations

We have foreign subsidiaries whose functional currencies are the Great British Pound ("GBP") and the Euro ("EUR"), The subsidiaries' accounts are translated from the relevant functional currency to the US dollar using the current exchange rate in effect at the balance sheet date, for balance sheet accounts, and using the average exchange rate during the period for revenues and expense accounts. The effects of translation are recorded as a separate component of stockholders' equity.

Our subsidiaries conduct their business with customers in local currencies. Exchange gains and losses arising from these transactions are recorded using the actual exchange differences on the date of the transaction. We have not taken any action to reduce our exposure to changes in foreign currency exchange rates, such as options or futures contracts, with respect to transactions with our subsidiaries or transactions with our customers where the invoicing currency is not the US dollar.

The table below sets forth our currency exposure (i.e., those transactional exposures that give rise to the net currency gains and losses recognized in the income and expenditure account) on our net monetary assets and liabilities. These exposures consist of our monetary assets and liabilities that are not denominated in the functional currency used by us or our subsidiary or affiliate having the asset or liability.

	As of December 31, 2002 Net foreign monetary assets/(liabilities)			
Functional currency of operations	Euro	US dollars	GBP	Other
		($ in millions)		
Great British Pound	$(0.4)	$0.7	$ –	$(0.1)
Euro	$ –	$0.2	$1.3	$ –

A movement of 10% in the US dollar to pound exchange rate would create an unrealized gain or loss of approximately $60,000.

We had no off balance sheet, or unrecognized, gains and losses in respect of financial instruments used as hedges at the beginning or end of the year ended December 31, 2002. We had no deferred gains or losses during the year covered.

Inflation

We do not believe that inflation has had a material adverse impact on our business or operating results during the periods presented.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Refer to the Index to the Financial Statements on Page F-1 of the Financial Report included herein.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

PART III

Certain information required by Part III is omitted from this report because we will file with the Securities and Exchange Commission a definitive proxy statement within 120 days after the end of our fiscal year for our Annual Meeting of Stockholders to be held on May 30, 2003 (the "Proxy Statement"), and the information included in the Proxy Statement is incorporated herein by reference.

Item 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information required by this item regarding directors is incorporated by reference to our Proxy Statement under the heading "Election of Directors." Information regarding executive officers is set forth in Item 1 of Part 1 of this report.

Section 16(A) Beneficial Ownership Reporting Compliance

Item 405 of Regulation S-K calls for disclosure of any known late filing or failure by an insider to file a report required by Section 16 of the Exchange Act. This disclosure is contained in the section entitled "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement and is incorporated herein by reference.

Item 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference from the information in the section entitled "Executive Compensation" in the Proxy Statement.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The information required by this item is incorporated by reference from the information in the section entitled "Security Ownership of Certain Beneficial Owners and Management" in the Proxy Statement.

Securities Authorized for Issuance under Equity Compensation Plans

The following table provides certain information with respect to all of our equity compensation plans in effect as of December 31, 2002.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	3,532,372	$4.93	1,264,867[1]&[2]
Equity compensation plans not approved by security holders	[3]		
Total	3,532,372		1,264,867

Footnotes

(1) Of the 1,264,867 shares available for issuance, 701,857 are reserved for issuance under our 1999 Employee Stock Purchase Plan, or ESPP.

(2) Evergreen provisions:

1999 ESPP Provision

The number of shares of SEQUENOM Common Stock available for issuance under the Plan shall automatically increase on the first trading day of January each calendar year during the term of the Plan, beginning with calendar year 2001, by an amount equal to one percent (1%) of the total number of shares of SEQUENOM Common Stock outstanding on the last trading day in December of the immediately preceding calendar year, but in no event shall any such annual increase exceed 500,000 shares.

1999 Equity Incentive Plan Provision

The number of shares of Common Stock available for issuance under the Plan shall automatically increase on the first trading day of January each calendar year during the term of the Plan, beginning with calendar year 2001, by an amount equal to four percent (4%) of the total number of shares of SEQUENOM Common Stock outstanding on the last trading day in December of the immediately preceding calendar year, but in no event shall any such annual increase exceed 2,000,000 shares.

(3) Excludes outstanding options and warrants that were acquired in conjunction with our acquisition of Gemini Genomics in 2001 and Axiom Biotechnologies in 2002.

A total of 984,665 options to purchase SEQUENOM Common Stock remain outstanding at a weighted average price of $15.87. Of these, 90,664 shares are reserved for issuance under the Gemini Genomics Company Share Option Plan-Part A, 333,563 shares are reserved for issuance under the Gemini Genomics Company Share Option Plan-Part B, 14,536 shares are reserved for issuance under the Gemini International Executive Share Option Plan, 537,902 shares are reserved for issuance outside the plan and 8,000 shares are reserved for issuance under a warrant agreement.

In connection with our acquisition of Axiom Biotechnologies, a total of 181,298 options to purchase SEQUENOM Common Stock remain outstanding at a weighted average price of $4.64, 97,111 shares are reserved for issuance under the Axiom 1997 Plan, 79,583 shares are reserved for issuance outside of the plan, and 4,604 shares are reserved for issuance under a warrant agreement.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this item is incorporated by reference from the information in the section entitled "Certain Transactions" in the Proxy Statement.

Item 14. CONTROLS AND PROCEDURES

(a) Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of design and operation of our disclosure controls and procedures, as such term is defined under Rule 13a-14(c) promulgated under the Securities Exchange Act of 1934, as amended, within the 90 days prior to the filing date of this report. Based on their evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures are effective as of the evaluation date.

(b) There have been no significant changes (including corrective actions with regard to significant deficiencies or material weaknesses) in our internal controls or in other factors that could significantly affect these controls subsequent to the date of the evaluation referenced in paragraph (a) above.

Limitations on the Effectiveness of Controls. The Company's management, including the CEO and CFO, does not expect that its disclosure controls will prevent all errors or potential fraud. A control system, no matter how well conceived and operated, can provide only reasonable not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their cost. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons or by collusion of two or more people. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, control may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES, AND REPORTS ON FORM 8-K

(a)(1) *Financial Statements*

The financial statements of the Company are included herein as required under Item 8 of this report. See Index to Financial Statements on page F-I.

(a)(2) Financial Statement Schedules

Schedule II—Valuation and Qualifying Accounts. The other financial statement schedules have been omitted because they are either not required, not applicable, or the information is otherwise included.

(3) *Exhibits*

The exhibits listed below are required by Item 601 of Regulation S-K. Each management contract or compensatory plan or arrangement required to be filed as an exhibit to this report has been identified.

(b) *Reports on Form 8-K*

There were no reports on Form 8-K filed in the quarter ended December 31, 2002.

Exhibit Number	Description of Document
3.1(1)	Amended and Restated Certificate of Incorporation of the Registrant.
3.2	Bylaws of Registrant, as amended. 3.3(10) Registrant's Certificate of Designation of Series A Junior Participating Preferred Stock.
3.3(8)	Registrant's Certificate of Designation of Series A Junior Participating Preferred Stock.
4.1(1)	Specimen common stock certificate.
4.2(8)	Rights Agreement dated as of October 22, 2001 between the Registrant and American Stock and Transfer & Trust Company.
10.1(1)	Form of Warrant Agreement between the Registrant and holders of the Series C Preferred Stock warrants.
10.2(1)	Amended and Restated Registration Rights Agreement, dated December 21, 1998.
10.3(7)	Registration Rights Agreement dated as of September 20, 2001 between the Registrant and Michael Fitzgerald, Genelink Holdings, Ltd., Raddison Trustee Ltd. and Clover Leaf Holdings Limited.
10.4(1)*	Collaboration Agreement, dated November 24, 1997, between the Registrant and Bruker-Franzen Analytik, GmbH.
10.5(1)	Master Equipment Lease Agreement No. 0135 and Letter extending the equipment lease, dated October 22, 1998, between Registrant and Phoenix Leasing Incorporated, as amended.
10.6(1)	Master Equipment Lease Agreement No. 0135 and Letter extending the equipment lease, dated October 22, 1998, between Registrant and Phoenix Leasing Incorporated, as amended.

Exhibit Number	Description of Document
10.7(1)	Form of Indemnification Agreement between the Registrant and each of its directors.
10.8(1)	Form of Indemnification Agreement between the Registrant and each of its officers.
10.9(1) #	1994 Stock Plan.
10.10(1) #	1994 Stock Plan Form of Non-Qualified Stock Option Grant.
10.11(1) #	1994 Stock Plan Form of Incentive Stock Option Grant.
10.12(1) #	1994 Stock Plan Form of Stock Restriction Agreement.
10.13(1) #	1998 Stock Option/Stock Issuance Plan.
10.14(1) #	1998 Stock Option/Stock Issuance Plan Form of Notice of Grant of Stock Option.
10.15(1) #	1998 Stock Option/Stock Issuance Plan Form of Stock Option Agreement.
10.16(1) #	1998 Stock Option/Stock Issuance Plan Form of Stock Purchase Agreement.
10.17(1) #	1998 Stock Option/Stock Issuance Plan Form of Stock Issuance Agreement.
10.18(1) #	1999 Stock Incentive Plan.
10.19(1) #	1999 Employee Stock Purchase Plan.
10.20(1) #	1999 Stock Incentive Plan Form of Notice of Grant of Stock Option.
10.21(1) #	1999 Stock Incentive Plan Form of Stock Option Agreement.
10.22(2)	Business Loan Agreement, dated March 3, 2000, between the Registrant and Union Bank of California.
10.23(3)	Building Lease Agreement, dated March 29, 2000, between the Registrant and TPSC IV LLC, a Delaware limited liability company.
10.24(4)	Global Master Rental Agreement, dated May 4, 2000, between the Registrant and Comdisco.
10.25(6)	First Amended and Restated Employment Agreement, dated as of June 30, 2000 between Toni Schuh and the Registrant.
10.26(6)	First Amended and Restated Employment Agreement, dated as of August 1, 2000 between Steve Zaniboni and the Registrant.
10.27(6)	First Amended and Restated Employment Agreement, dated as of August 1, 2000 between Andi Braun and the Registrant.
10.28(6)*	Technology Access and Collaboration Agreement Addendum dated as of January 23, 2001 between Incyte Genomics and the Registrant.
10.29(5)#	Form of Employment Agreement between Registrant and Employees Listed on A thereto, as amended.
10.30	Confidential Retirement Agreement and General Release of all Claims, dated December 2, 2002, between the Registrant and Delbert F. Foit, Jr.
21.1	Subsidiaries of Registrant.
23.1	Consent of Ernst & Young LLP, Independent Auditors.
99.1	Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

Management contract or compensatory plan.

* Certain confidential portions of this Exhibit have been omitted pursuant to a request for confidential treatment. Omitted portions have been filed separately with the Securities and Exchange Commission.

(1) Incorporated by reference to the Registrant's Registration Statement on Form S-1 (No. 333-91665), as amended.

(2) Incorporated by reference to the Registrant's Annual Report on Form 10-K for the year ended December 31, 1999.

(3) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2000.

(4) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2000.

(5) Incorporated by reference to the Registrant's Registration Statement on Form S-1 (No. 333-91665), as amended, which exhibit is hereby supplemented with an additional Schedule A filed with this Annual Report on Form 10-K.

(6) Incorporated by reference to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2000.

(7) Incorporated by reference to the Registrant's proxy statement for its special meeting of stockholders filed with the SEC on July 19, 2001.

(8) Incorporated by reference to the Registrant's Current Report on Form 8-K filed October 23, 2001.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: March 28, 2003

SEQUENOM, INC.

By: /s/ ANTONIUS SCHUH
Antonius Schuh
President, Chief Executive Officer
and Director

POWER OF ATTORNEY

Know all men by these presents, that each person whose signature appears below constitutes and appoints Antonius Schuh or Stephen L. Zaniboni, his attorney-in-fact, with power of substitution in any and all capacities, to sign any amendments to this Annual Report on Form 10-K, and to file the same with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that the attorney-in-fact or his substitute or substitutes may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Signature	Title	Date
/s/ ANTONIUS SCHUH Antonius Schuh	President, Chief Executive Officer and Director	March 28, 2003
/s/ STEPHEN L. ZANIBONI Stephen L. Zaniboni	Chief Financial Officer (Principal Financial and Accounting Officer)	March 28, 2003
/s/ CHARLES CANTOR Charles Cantor	Chief Scientific Officer and Director	March 28, 2003
/s/ HELMUT SCHÜHSLER Helmut Schühsler	Chairman of the Board of Directors	March 28, 2003
/s/ ERNST-GUNTER AFTING Ernst-Gunter Afting	Acting Director	March 28, 2003
/s/ HARRY F. HIXSON, JR. Harry F. Hixson, Jr.	Director	March 28, 2003
/s/ JOHN LUCAS John Lucas	Director	March 28, 2003
/s/ KRIS VENKAT Kris Venkat	Director	March 28, 2003
_____ Michael Fitzgerald	Director	March 28, 2003

CERTIFICATIONS

I, Antonius Schuh, certify that:

1. I have reviewed this annual report on Form 10-K of Sequenom Corporation;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

   a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

   c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Dated: March 28, 2003

/s/ ANTONIUS SCHUH

Antonius Schuh, Chief Executive Officer

I, Stephen L. Zaniboni, certify that:

1. I have reviewed this annual report on Form 10-K of Sequenom Corporation;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

   a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

   c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Dated: March 28, 2003

/s/ STEPHEN L. ZANIBONI

Stephen L. Zaniboni, Chief Financial Officer

SEQUENOM, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Ernst & Young LLP, Independent Auditors

The Board of Directors
SEQUENOM, Inc.

We have audited the accompanying consolidated balance sheets of SEQUENOM, Inc. as of December 31, 2002 and 2001 and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2002. Our audits also included the financial statement schedule listed in the index at Item 15 (a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. 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 consolidated financial position of SEQUENOM, Inc. at December 31, 2002 and 2001 and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly, in all material respects the information set forth therein.

ERNST & YOUNG LLP

Ernst + Young LLP

San Diego, California
February 25, 2003

SEQUENOM, INC.

CONSOLIDATED BALANCE SHEETS

(Dollars in thousands, except share and per share information)

	December 31, 2002	December 31, 2001
Assets		
Current assets:		
Cash and cash equivalents	$ 32,052	$ 71,686
Short-term investments, available-for-sale	57,570	67,322
Restricted cash and investments	5,977	2,377
Accounts receivable, net	7,714	9,995
Inventories, net	7,710	8,051
Other current assets and prepaid expenses	3,320	4,134
Total current assets	114,343	163,565
Equipment and leasehold improvements, net	15,926	25,099
Intangible assets, net	14,590	19,416
Restricted cash and investments	6,951	1,750
Goodwill	–	141,565
Other assets	798	4,986
Total assets	$152,608	$356,381
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$8,345	$ 14,466
Accrued expenses	7,940	6,998
Accrued acquisition and integration costs	3,926	6,519
Deferred revenue	3,107	6,625
Current portion of long-term bank debt	4,942	1,250
Current portion of capital lease obligations	713	1,059
Total current liabilities	28,973	36,917
Deferred revenue, less current portion	733	1,800
Capital lease obligations, less current portion	508	1,092
Long-term debt, less current portion	9,234	1,750
Long-term deferred tax liability	4,911	6,220
Commitments and contingencies		
Stockholders' equity:		
Convertible preferred stock, par value $0.001; authorized shares – 5,000,000.	–	–
Common stock, par value $0.001; authorized shares – 75,000,000 at December 31, 2002 and 2001; issued and outstanding shares 39,395,262 and 37,367,228 at December 31, 2002 and 2001, respectively.	39	37
Additional paid-in capital	452,725	447,756
Deferred compensation related to stock options	(187)	(605)
Accumulated other comprehensive income	389	437
Accumulated deficit	(344,717)	(139,023)
Total stockholders' equity	108,249	308,602
Total liabilities and stockholders' equity	$152,608	$356,381

See accompanying notes.

SEQUENOM, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(Dollars in thousands, except share and per share information)

	Years ended December 31,		
	2002	2001	2000
Revenues:			
Products	$ 24,868	$ 21,524	$ 8,253
Services	5,646	8,942	1,447
Research	371	269	337
Total revenues	30,885	30,735	10,037
Costs and expenses:			
Cost of product and service revenue	17,474	19,780	6,574
Research and development	33,451	29,327	18,433
Selling, general and administrative	28,464	24,167	18,492
Impairment of assets and goodwill	33,126	–	–
In-process research and development	3,668	24,920	–
Integration costs	3,000	–	–
Amortization of acquired intangibles	3,734	935	–
Amortization of deferred stock compensation ($351 and $67, $789 and $150, $3,142 and $599, related to selling, general and administrative and research and development in 2002, 2001 and 2000, respectively)	418	939	3,741
Total costs and expenses	123,335	100,068	47,240
Loss from operations	(92,450)	(69,333)	(37,203)
Interest income	3,865	6,796	8,925
Interest expense	(408)	(343)	(4,683)
Equity share of loss in investee	(1,000)	–	–
Other (expense) income	(63)	248	75
Loss before income tax and cumulative effect of accounting change	(90,056)	(62,632)	(32,886)
Deferred income tax benefit	1,309	–	–
Loss before cumulative effect of accounting change	(88,747)	(62,632)	(32,886)
Cumulative effect of accounting change	(116,947)	–	–
Net loss	$(205,694)	$ (62,632)	$ (32,886)
Net loss per share, basic and diluted			
Before cumulative effect of accounting change	$ (2.32)	$ (2.25)	$ (1.46)
Cumulative effect of accounting change	$ (3.07)	–	–
Net loss per share, basic and diluted	$ (5.39)	$ (2.25)	$ (1.46)
Weighted average shares outstanding, basic and diluted	38,149,692	27,816,470	22,453,797

See accompanying notes.

SEQUENOM, INC.SEQUENOM, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

($ in thousands)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Notes Receivable From Officers	Deferred Compensation Related to Stock Options	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount						
Balance at December 31, 1999	14,842,757	$ 15	2,298,675	$ 2	$ 66,300	$(2,057)	$(3,619)	$ 400	$ (43,505)	$ 17,535
Net loss	–	–	–	–	–	–	–	–	(32,886)	(32,886)
Unrealized gain on available-for-sale securities	–	–	–	–	–	–	–	229	–	229
Translation adjustment	–	–	–	–	–	–	–	(314)	–	(314)
Comprehensive loss	–	–	–	–	–	–	–	–	–	(32,971)
Exercise of stock options	–	–	760,504	1	811	–	–	–	–	812
Purchases under Employee Stock Purchase Plan	–	–	12,761	–	282	–	–	–	–	282
Issuance of stock to consultants	–	–	57,564	–	1,486	–	–	–	–	1,486
Exercise of warrants	–	–	137,339	–	28	–	–	–	–	28
Issuance of stock options to consultants	–	–	–	–	115	–	–	–	–	115
Issuance of common stock in connection with IPO, net of issuance costs of $12,950,158	–	–	6,037,500	6	144,051	–	–	–	–	144,057
Conversion of preferred stock to common stock	(14,842,757)	(15)	14,842,757	15	–	–	–	–	–	–
Conversion of debt to equity	–	–	272,108	–	6,792	–	–	–	–	6,792
Interest paid with stock	–	–	22,884	–	595	–	–	–	–	595
Forgiveness of notes receivable from officers	–	–	–	–	–	3,785	–	–	–	3,785
Issuance of notes receivable to officers related to exercise of stock options	–	–	–	–	–	(2,327)	–	–	–	(2,327)
Remeasurement of stock options	–	–	–	–	1,006	–	–	–	–	1,006
Deferred compensation	–	–	–	–	1,674	–	(1,674)	–	–	–
Amortization of deferred compensation	–	–	–	–	–	–	3,742	–	–	3,742
Balance at December 31, 2000	–	–	24,442,092	24	223,140	(599)	(1,551)	315	(76,391)	144,938

SEQUENOM, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Continued)

($ in thousands)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Notes Receivable From Officers	Deferred Compensation Related to Stock Options	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount						
Balance at December 31, 2000	–	–	24,442,092	24	223,140	(599)	(1,551)	315	(76,391)	144,938
Net loss	–	–	–	–	–	–	–	–	(62,632)	(62,632)
Unrealized gain on available-for-sale securities	–	–	–	–	–	–	–	569	–	569
Translation adjustment	–	–	–	–	–	–	–	(447)	–	(447)
Comprehensive loss	–	–	–	–	–	–	–	–	–	(62,510)
Exercise of stock options	–	–	53,566	–	45	–	–	–	–	45
Purchases under Employee Stock Purchase Plan	–	–	50,422	–	651	–	–	–	–	651
Repurchase of unvested stock	–	–	(129,688)	–	(117)	–	–	–	–	(117)
Issuance of stock options to consultants	–	–	–	–	143	–	(143)	–	–	–
Amortization of deferred compensation	–	–	–	–	304	–	1,089	–	–	1,393
Issuance of common stock in connection with business combination	–	–	12,950,836	13	223,590	–	–	–	–	223,603
Forgiveness of notes receivable from officers	–	–	–	–	–	800	–	–	–	801
Issuance of notes receivable to officers related to exercise of stock options	–	–	–	–	–	(201)	–	–	–	(201)
Balance at December 31, 2001	–	$ –	37,367,228	$37	$447,756	$ –	$ (605)	$437	$(139,023)	$308,602
Net loss	–	–	–	–	–	–	–	–	(205,694)	(205,694)
Unrealized loss on available-for-sale securities	–	–	–	–	–	–	–	(19)	–	(19)
Translation adjustment	–	–	–	–	–	–	–	(29)	–	(29)
Comprehensive loss	–	–	–	–	–	–	–	–	–	(205,742)
Exercise of stock options and purchases under Employee Stock Purchase Plan	–	–	308,418	–	1,014	–	–	–	–	1,014
Amortization of deferred compensation	–	–	–	–	–	–	418	–	–	418
Issuance of common stock in connection with business combination	–	–	1,719,616	2	3,955	–	–	–	–	3,957
Balance at December 31, 2002	–	$ –	39,395,262	$39	$452,725	$ –	$ (187)	$389	$(344,717)	$108,249

See accompanying notes.

SEQUENOM, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(Dollars in thousands)

	Years ended December 31,		
	2002	2001	2000
Operating activities			
Net loss	$(205,694)	$ (62,632)	$ (32,886)
Adjustments to reconcile net loss to net cash used in operating activities:			
Cumulative effect of accounting change	116,947	–	–
In-process research and development	3,668	24,920	–
Amortization of deferred compensation	418	1,392	4,863
Depreciation and amortization	12,639	7,197	3,743
Impairment of goodwill and other assets	33,126	–	–
Integration charge	3,000	–	–
Non-cash interest expense on conversion of debt	–	–	4,381
Non-cash forgiveness of loans	–	809	3,785
Loss on disposal of fixed assets	324	53	58
Deferred taxes	(1,309)	–	–
Equity share of loss in investee	1,000	–	–
Changes in operating assets and liabilities:			
Inventories	1,271	(4,776)	(2,686)
Accounts receivable	2,651	(5,780)	(3,665)
Other current assets	758	6,274	(8,789)
Other assets	741	(856)	(4,077)
Accounts payable and accrued expenses	(8,118)	3,152	541
Unearned revenue	(4,594)	(2,155)	10,454
Other liabilities	(46)	(3,810)	3,898
Net cash used in operating activities	(43,218)	(36,212)	(20,380)
Investing activities			
Purchase of equipment, leasehold improvements, and intangible assets	(5,538)	(22,246)	(5,801)
Cash acquired from business combination	568	61,350	–
Restricted cash	(8,730)	(3,000)	–
Investment in investee	(1,000)	–	–
Purchases of marketable securities	(91,301)	(98,319)	(64,100)
Sales of marketable securities	41,547	50,953	575
Maturities of marketable securities	58,712	48,975	11,791
Net cash (used in) provided by investing activities	(5,742)	37,713	(57,535)

SEQUENOM, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)

(Dollars in thousands)

	Years ended December 31,		
	2002	2001	2000
Financing activities			
Net proceeds from initial public offering	–	–	144,057
Repayment of long-term debt	(1,587)	–	(3,090)
Proceeds from long-term debt	12,219	–	–
Borrowings under capital lease obligations	–	1,275	905
Payments on capital lease obligations	(1,023)	(1,159)	(522)
Proceeds from sale of stock to consultants	–	–	1,487
Proceeds from exercise of warrants, stock options and Employee Stock Purchase Plan purchases	804	579	725
Loans granted to officers	–	(202)	(599)
Net cash provided by financing activities	10,413	493	142,963
Net increase (decrease) in cash and cash equivalents	(38,547)	1,994	65,048
Effect of exchange rate changes on cash and cash equivalents	(1,087)	(354)	(203)
Cash and cash equivalents at beginning of year	71,686	70,046	5,201
Cash and cash equivalents at end of year	$ 32,052	$ 71,686	$ 70,046
Supplemental schedule of non-cash investing and financing activities:			
Conversion of preferred stock to common stock upon initial public offering	$ –	$ –	$ 56,794
Conversion of long-term debt and interest payable to common stock	$ –	$ –	$ 7,387
Fair value of net assets acquired for stock, less cash	$ 4,465	$ 171,363	$ –
Supplemental disclosure of cash flow information:			
Interest paid	$ 408	$ 343	$ 339

See accompanying notes.

1. Nature of the Business

SEQUENOM, Inc. (the "Company") was incorporated on February 14, 1994 in the State of Delaware. SEQUENOM is a leading genetics company organized into two distinct business units: SEQUENOM Genetic Systems and SEQUENOM Pharmaceuticals. The two business units combine to capitalize on our high performance DNA analysis platform, SNP assay portfolio, disease gene discovery programs and extensive DNA sample repository. SEQUENOM Genetic Systems is dedicated to the sales and support of our MassARRAY products and the continued expansion of platform applications. SEQUENOM Pharmaceuticals applies the power of human genetics to systematically identify disease-related genes that affect significant portions of the overall population. SEQUENOM Pharmaceuticals segment focuses on disease gene discovery, target identification, functional validation and ultimately diagnostic and therapeutic product development.

In August 2002, we completed our acquisition of Axiom Biotechnologies, Inc., a privately held company based in San Diego, CA. This acquisition should enable us to move our candidate disease genes forward through the drug discovery process by adding internal medicinal chemistry, assay and screening abilities, a library of well characterized human cell lines, and intellectual property. The transaction was accounted for using the purchase method of accounting, and, accordingly, the results of operations have been included in the accompanying financial statements from the date of acquisition, which impacts the comparability of the financial information presented.

In September 2001, the Company completed the acquisition of Gemini Genomics plc, a public company based in the United Kingdom. Gemini Genomics was a clinical genomics company focused on the discovery and commercialization of novel gene-based drug discovery targets. Gemini had collected and analyzed information from a wide range of human population groups, including twins, disease-affected families, isolated or founder populations, and drug trial subjects. The transaction was accounted for using the purchase method of accounting and, accordingly, the results of operations have been included in the accompanying financial statements from the date of acquisition, which significantly affects the comparability of the financial information presented.

2. Summary of Significant Accounting Policies and Significant Accounts

Basis of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries located in Germany and the United Kingdom. All significant intercompany accounts and transactions are eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make certain 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 reporting period. Actual results could differ from those estimates. Significant estimates are as follows:

Accrued acquisition and integration costs

To the extent that exact amounts are not determinable, the Company has estimated amounts for direct costs of the acquisitions of Gemini Genomics and Axiom Biotechnologies and the related restructuring costs in accordance with Emerging Issues Task Force ("EITF") 95-3, "Recognition of Liabilities in Connection with a Purchase Business Combination." Accrued acquisition and integration related costs totaled approximately $3.9 million at December 31, 2002 and primarily represented the amount the Company expects to incur related to facility exit costs. We expect that it may take us from six months to a year, or possibly longer, to sublease the identified surplus space. Materially different results would be likely if it takes longer than expected to sublease or terminate current lease agreements or if financial terms of subleases or termination of agreements are different than estimated.

Impairment of long-lived assets

The Company periodically re-evaluates the original assumptions and rationale utilized in the establishment of the carrying value and estimated lives of its long-lived assets. The criteria used for these evaluations include management's estimate of the asset's continuing ability to generate income from operations and positive cash flows in future periods as well as the strategic significance of any intangible assets in the Company's business objectives. If assets are considered to be impaired, the impairment recognized is the amount by which the carrying value of the assets exceeds the fair value of the assets.

Valuation of deferred income taxes

Valuation allowances are established to reduce deferred tax assets to the amount expected to be realized. The likelihood of a material change in our expected realization of these assets depends on future taxable income, our ability to deduct tax loss carry-forwards against future taxable income, the effectiveness of our tax planning and strategies in the multiple tax jurisdictions where we operate, and any significant changes in the tax treatment received on our business combinations.

Cumulative effect of accounting change

In January 2001, the Company adopted Statement of Financial Accounting Standards ("SFAS") No. 142, "Goodwill and Other Intangible Assets", which requires that goodwill and intangible assets deemed to have an indefinite useful life will no longer be amortized but will be reviewed for impairment upon adoption of SFAS No. 142 and annually thereafter. The Company performed its annual impairment review during the fourth quarter of each year.

Under SFAS No. 142, goodwill impairment is deemed to exist if the net book value of a reporting unit exceeds its estimated fair value. No amortization on the goodwill arising as a result of our acquisition of Gemini Genomics in September 2001 was recognized during 2001 in accordance with the transition arrangements in SFAS No. 142. Upon adoption of SFAS No. 142 in January 2002, the Company recognized a one-time, non-cash charge of $116.9 million to reduce the carrying value of its goodwill. The charge is non-operational in nature and is reflected as a cumulative effect of an accounting change in the consolidated statement of operations. In calculating the impairment charge, the fair value of the SEQUENOM Pharmaceuticals segment was estimated using a discounted cash flow methodology, and the charge related entirely to the SEQUENOM Pharmaceuticals segment.

The SFAS No. 142 goodwill impairment is associated solely with goodwill resulting from the acquisition of Gemini Genomics. The amount of the impairment primarily reflects a decline in long term market expectations for genomics companies which in turn has led to a decline in the Company's stock price since the acquisition was announced and valued for accounting purposes in May 2001.

Segment reporting

SFAS No. 131, "Disclosures About Segments of an Enterprise and Related Information", requires the use of a management approach in identifying segments of an enterprise. During 2001, the Company operated in one business segment, discovery genetics. The Company integrated the historical genetic discovery business with Gemini Genomics during 2002 and as a result reports financial results and the progress of the business in two distinct business units: SEQUENOM Genetic Systems and SEQUENOM Pharmaceuticals for the year ended December 31, 2002.

The genetic systems unit is dedicated to the sales management and support of our MassARRAY hardware, consumable and software product offerings and the continual expansion of platform applications. The pharmaceutical unit applies the power of human genetics to systematically identify disease-related genes. The unit focuses on disease gene discovery, target identification, functional validation and diagnostic and therapeutic product development.

The results of the segments of the business are as follows:

	Year ended December 31, 2002		
($ in thousands)	SEQUENOM Genetic Systems	SEQUENOM Pharmaceuticals	Total
Product sales	$ 24,762	$ 106	$ 24,868
Validation services	5,454	192	5,646
Research	55	316	371
Total revenues	30,271	614	30,885
Cost of product and service revenue	17,141	333	17,474
Research and development	16,234	17,217	33,451
Selling, general and administrative	21,875	6,589	28,464
Impairment of assets and goodwill	1,134	31,992	33,126
In-process research and development	–	3,668	3,668
Integration costs	–	3,000	3,000
Amortization of intangibles	–	3,734	3,734
Amortization of deferred stock compensation	334	84	418
Total costs and expenses	56,718	66,617	123,335
Loss from operations	$(26,447)	$(66,003)	$(92,450)

Separate financial information for SEQUENOM Genetic Systems and SEQUENOM Pharmaceuticals prior to 2002 has not been provided as SEQUENOM then operated in one business segment, making it impracticable to do so. The Company does not currently segregate assets by segment as a significant portion of the Company's total assets are assets commonly used by both segments and cash and cash equivalents which the Company does not assign to its two operating segments. The Company is evaluating the feasibility and usefulness of assigning its other assets to SEQUENOM Genetic Systems and SEQUENOM Pharmaceutical segments and may report assets by segment in the future.

Shipping and handling costs

Shipping and handling costs are included within cost of product and service revenue on the income statement.

Cash and Cash Equivalents

Cash equivalents consist of highly liquid investments with maturities at date of purchase of three months or less.

Short-Term Investments

The Company's investment securities are classified as available-for-sale. These investments are stated at fair value with unrealized gains or losses included in comprehensive income (loss) until realized. Realized gains or losses, calculated based on the specific identification method, are recorded in other income, net, and were not material for the years ended December 31, 2002, 2001 and 2000. The amortized costs of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. The amortization and interest on securities are included in interest income.

The Company invests primarily in commercial paper of prime quality, certificates of deposit, guaranteed bankers acceptance and US Government instruments, and by policy, limits the amount of credit exposure to any one issuer. At December 31, 2002, the Company had invested in no single financial instrument that represented a significant concentration of credit risk.

The amounts reported below as market value were obtained from investment manager reports.

At December 31, 2002, short-term investments consisted of the following:

($ in thousands)	Amortized Cost	Market Value	Unrealized Gain/(Loss)
Obligations of US Government Agencies	$ 498	$ 500	$ 2
Corporate debt securities	53,188	53,079	(109)
Certificates of deposit	3,578	3,578	–
Municipal Bonds	414	413	(1)
Total short-term investments	$ 57,678	$ 57,570	$ (108)

Approximately 62% and 38% of these securities mature within one and two years of December 31, 2002, respectively.

At December 31, 2001, short-term investments consisted of the following:

($ in thousands)	Amortized Cost	Market Value	Unrealized Gain/(Loss)
Corporate debt securities	$ 63,862	$ 64,205	$ 343
Certificates of deposit	3,126	3,117	(9)
Total short-term investments	$ 66,988	$ 67,322	$ 334

Restricted Cash

Restricted cash of $12.9 million as of December 31, 2002 is held in term deposits with restrictions of withdrawal, in support of certain operating lease obligations and borrowing agreements. Restricted cash totaled $4.1 million at December 31, 2001.

Concentration of Risks

The Company grants credit generally on an unsecured basis to customers throughout North America, Europe, and Asia. The Company establishes an allowance for doubtful accounts based upon factors surrounding the credit risk of specific customers, historical trends, and other information. To reduce credit risk, certain sales are secured by letters of credit from commercial banks. The regional concentration of accounts receivables were as follows:

($ in thousands)

Region	December 31, 2002	Percent of receivable balance	December 31, 2001	Percent of receivable balance
Europe	$3,517	46%	$ 611	6%
Asia	1,083	14%	4,299	43%
North America	3,114	40%	5,085	51%
Total	$7,714	100%	$9,995	100%

Approximately $5.6 million and $8.9 million, or 18% and 28% of the Company's revenues during the years ended December 31, 2002 and 2001, respectively, validation services provided to pharmaceutical companies. If there were to be a change in the funding or spending of these companies, it could have a material adverse impact on the Company's future results of operations. Two Asia-based customers together represented $5.1 million and $1.7 million, or 21% and 8% of the total product revenues during the year ended December 31, 2002 and 2001, respectively. If the relationship with these customers were to change, there could be a material adverse impact upon SEQUENOM Genetic Systems segment.

Our products incorporate components that are available from only one or a limited number of suppliers. Many of these components are manufactured with lead times which can be significant. Shortages of various essential materials could occur due to interruption of supply. If we were unable to procure certain such components from suppliers or sub-contractors, it could affect our ability to meet demand for our products which would have an adverse effect upon our results.

Inventories

Inventories are stated at the lower of cost (first-in, first-out) or market value. Standard cost, which approximates actual cost, is used to value inventories. The components of inventories were:

	December 31,	
	2002	2001
	($ in thousands)	
Raw materials	$4,299	$3,859
Work in process	141	61
Finished goods	3,270	4,131
Total	$7,710	$8,051

Equipment and Leasehold Improvements

Equipment is stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets (generally 3 to 5 years, or the lease term, whichever is shorter). Leasehold improvements are amortized using the straight-line method over the estimated useful life of the improvement or the remaining term of the lease, whichever is shorter. The maximum estimated useful life of any leasehold improvement is 15 years from the completion of the improvement.

Equipment and leasehold improvements and related accumulated depreciation and amortization were as follows:

	December 31,	
	2002	2001
	($ in thousands)	
Land and building	$ —	$ 215
Laboratory equipment	22,590	25,426
Leasehold improvements	5,514	6,331
Office furniture and equipment	6,568	7,726
	34,672	39,698
Less accumulated depreciation and amortization	(18,746)	(14,599)
	$15,926	$25,099

Depreciation expense for the years ended December 31, 2002, 2001 and 2000 was $8.0 million, $6.7 million, and $3.0 million, respectively.

Intangible Assets

Intangible assets consisted of the following:

		December 31, 2002		December 31, 2001	
	Weighted average life	Gross carrying amount	Accumulated amortization	Gross carrying amount	Accumulated amortization
Clinical data collections	5	$16,110	$(4,028)	$17,860	$ (893)
Purchased patent rights and licenses	5	3,589	(1,081)	3,220	(771)
Total		$19,699	$(5,109)	$21,080	$(1,664)

Intangible amortization for the year ended December 31, 2002 was $4.6 million. Estimated aggregate amortization expense for the next five years is as follows:

Year ended December 31,	$ in millions
2003	$ 3.9
2004	3.8
2005	3.8
2006	2.9
2007	0.2
	$14.6

In accordance with SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", the Company examines its tangible and intangible assets when events or changes in circumstances indicate that the carrying value of the long-lived asset might not be recoverable. In relation to the decline in revenues from genetic services and the progress of various internal research projects during the fourth quarter of 2002 specific long-lived assets were subject to a detailed review. Based on this evaluation, the Company determined that long-lived assets with a carrying amount of $10.8 million were no longer recoverable and were in fact impaired, and wrote them down to their estimated fair value of $2.7 million. Fair value was based on discounted expected future cash flows to be generated by these assets. An impairment charge of $8.1 million was accordingly recorded for these assets, $7.0 million relating to SEQUENOM Pharmaceuticals and the remaining $1.1 million relating to SEQUENOM Genetic Systems. This charge is included within the income statement as a component of the line, impairment of goodwill and long-lived assets. These assets primarily included equipment, purchased patent rights, and software.

Goodwill

Goodwill, which was primarily from the Company's 2001 acquisition of Gemini Genomics represents the excess of cost over the fair value of the net tangible and identifiable intangible assets purchased, and was determined to be partially impaired by independent third party review upon adoption of SFAS No. 142 in January 2002 and fully impaired in the subsequent annual review in the fourth quarter of 2002.

Software Costs

In accordance with SFAS No. 86, "Accounting for Costs of Computer Software to be Sold, Leased, or Otherwise Marketed", purchased software is capitalized at cost and amortized over the estimated useful life, generally three years. Costs incurred in conjunction with software developed for use in the Company's products and improvements to existing software incorporated in systems already in use by customers are expensed as incurred. Expenditures to date have been classified as research and development expense.

Fair Value of Financial Instruments

Financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, are carried at cost, which management believes approximates fair value because of the short term maturity of these instruments. The carrying value of long-term debt approximates the fair value of the debt as the interest rates currently available to us from the same source of funding do not significantly differ from the rates reflected in the original agreement.

Revenue Recognition

In accordance with Staff Accounting Bulletin ("SAB") No. 101, "Revenue Recognition in Financial Statements", revenues are recognized, when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed and determinable and collectibility is reasonably assured. Revenue is deferred for fees received before earned. Revenues from the MassARRAY system and consumables are recognized generally upon shipment and transfer of title to the customer. Revenues for proprietary software are recognized over the duration of the software license, or upon transfer of title to the customer. The Company recognizes revenue allocated to maintenance fees for ongoing customer support over the maintenance period. Revenues from SNP validation services are recognized at the completion of key stages in the performance of the service, which is generally delivery of SNP assay information. Grant revenue is recorded as the research expenses relating to the grants are incurred, provided that the amounts received are not refundable if the research is not successful. Amounts received that are refundable if the research is not successful would be recorded as deferred revenue and recognized as revenue upon the grantor's acceptance of the success of the research results.

Research and Development Costs

Research and development costs are expensed as incurred. These costs include personnel expenses, contractor fees, laboratory supplies, facilities, miscellaneous expenses and allocation of corporate costs. These expenses are incurred during proprietary research and development activities, as well as providing services under collaborative research agreements and grants.

Foreign Currency Translation and Transactions

The financial statements of the Company's German and United Kingdom subsidiaries are measured using, respectively, the Euro ("EUR") and Great British pound ("GBP"), as the functional currency. Assets and liabilities of these subsidiaries are translated at the rates of exchange at the balance sheet date. Income and expense items are translated at the average daily rate of exchange during the reporting period. Resulting remeasurement gains or losses are recognized as a component of other comprehensive income. Transactions denominated in currencies other than the local currency are recorded based on exchange rates at the time such transactions arise. Subsequent changes in exchange rates result in transaction gains and losses, which are reflected in income as unrealized (based on period-end translations) or realized upon settlement of the transaction. Transaction gains or losses were not material for the years ended December 31, 2002, 2001 and 2000.

Stock-Based Compensation

As permitted by SFAS No. 123, "Accounting for Stock-Based Compensation", the Company has elected to follow Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees", and related Interpretations in accounting for stock-based employee compensation. Under APB No. 25, if the exercise price of the Company's employee and director stock options equals or exceeds the estimated fair value of the underlying stock on the date of grant, no compensation expense is recognized.

Had compensation cost for stock-based awards been determined consistent with the fair value method prescribed in SFAS No. 123, the Company's net loss would have been changed to the following pro forma amounts:

	Years ended December 31,		
	2002	2001	2000
	($ in thousands, except per share information)		
Pro forma net loss	$ (212,843)	$ (66,998)	$ (43,192)
Net loss as reported	$ (205,694)	$ (62,632)	$ (32,886)
Pro forma net loss per share, basic and diluted	$ (5.58)	$ (2.41)	$ (1.92)
Net loss per share, basic and diluted, as reported	$ (5.39)	$ (2.25)	$ (1.46)

The fair value of stock-based awards was estimated at the date of grant as follows:

	2002	2001	2000
Model	Black-Scholes	Black-Scholes	Black-Scholes
Risk free interest rates	4%	5%	6%
Volatility	99%	90%	90%
Dividend yield	0%	0%	0%
Weighted average life	4	4	4

When the exercise price of the employee or director stock options is less than the estimated fair value of the underlying stock on the grant date, the Company records deferred compensation for the difference and amortizes this amount to expense in accordance with Financial Accounting Standards Board ("FASB") Interpretation No. 28, "Accounting for Stock Appreciation Rights and Other Variable Stock Option or Award Plans," over the vesting period of the options.

Options or stock awards issued to non-employees are recorded at their fair value and periodically remeasured as determined in accordance with SFAS No. 123 and EITF 96-18 "Accounting for Equity Instruments with Variable Terms that are Issued For Consideration other than Employee Services Under SFAS No. 123," and recognized over the related service period.

Comprehensive Income (Loss)

In accordance with SFAS No. 130, "Reporting Comprehensive Income", unrealized gains or losses on the Company's available-for-sale securities and foreign currency translation adjustments are included in other comprehensive income (loss).

Net Loss Per Share

In accordance with SFAS No. 128, "Earnings Per Share", basic net income (loss) per share is computed by dividing the net income (loss) for the period by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing the net income (loss) for the period by the weighted average number of common and common equivalent shares outstanding during the period. Common equivalent shares are comprised of incremental common shares issuable upon the exercise of stock options and warrants, and common shares issuable on conversion of preferred stock, and were excluded from historical diluted loss per share because of their anti-dilutive effect.

Reclassifications

Certain amounts in the prior year financial statements have been reclassified to conform to the current year presentation.

Recent Accounting Pronouncements

In October 2001, the Financial Accounting Standards Board issued SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets." SFAS No. 144 replaces SFAS No. 121 and provisions of APB Opinion No. 30, "Reporting the Results of Operations-Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions," for the disposal of segments of a business and is effective for fiscal years beginning after December 15, 2001. The statement creates one accounting model, based on the framework established in SFAS No. 121, to be applied to all long-lived assets including discontinued operations. SFAS No. 144 became effective for the Company on January 1, 2002. Application of the principles of SFAS No. 144 resulted in a charge of $8.1 million in the year ended December 31, 2002, for various tangible and intangible assets where the carrying value exceeded the expected future revenue from those assets as described above under Intangible Assets.

In June 2002, the FASB issued Statement No. 146, "Accounting for Costs Associated with Exit or Disposal Activities". This Statement requires recording costs associated with exit or disposal activities at their fair values when a liability has been incurred. Under previous guidance, certain exit costs were accrued upon management's commitment to an exit plan, which is generally before an actual liability has been incurred. Adoption of this Statement is required at the beginning of fiscal year 2003. This Statement will impact the timing of exit or disposal activities reported by the Company after adoption.

In December 2002, the FASB isued SFAS No. 148, "Accounting for Stock-Based Compensation — Transition and Disclosure", an amendment of SFAS 123. This statement amends SFAS No. 123, "Accounting for Stock-Based Compnesation to provide alternative methods of voluntarily transitioning to the fair value based method of accounting for stock-based employee compensation. SFAS No. 148 also amends the disclosure requirements of SFAS No. 123 to require disclosure of the method used to account for stock-based employee compensation and the effect of the method on reported results in both annual and interim financial statements. The disclosure provisions are effective for the year ended December 31, 2002. The Company has followed the prescribed format. The Company has not yet completed the final

evaluation of the transitioning options presented by SFAS No. 148. However, during 2003, we expect to reach a determination of whether and, if so, when to change our existing accounting for stock-based compensation to the fair value method in accordance with the transition alternatives of SFAS No. 148.

3. Business Combinations

In August 2002, SEQUENOM completed the acquisition of Axiom Biotechnologies, Inc., a privately-held company based in San Diego, California. Under the terms of the agreement, holders of Axiom Biotechnologies stock received 0.2093 of a share of newly issued SEQUENOM common stock in exchange for each share of capital stock of Axiom. As a result of this transaction, SEQUENOM issued approximately 1.7 million shares of its common stock and assumed outstanding options and warrants, equivalent to approximately 250,000 additional shares of common stock. Four hundred thousand of the 1.7 million shares relating to this transaction have been placed in escrow, and may be released from escrow on August 30, 2003, subject to a reduction based upon certain indemnification obligations of Axiom Biotechnologies to SEQUENOM. The transaction was accounted for using the purchase method of accounting.

In connection with this transaction, the Company conducted a valuation of the intangible assets acquired in order to allocate the purchase price in accordance with Accounting Principles Board Opinion No. 16. The total purchase price of $5.0 million is estimated to be allocated as follows ($ in millions):

Net assets acquired	$ 0.4
In-process research and development	3.7
Intangible assets	0.5
Other	0.4
	$ 5.0

The intangible assets are being amortized over their estimated useful lives of five years and are categorized as patent rights and licenses. At the time of acquisition, the technological feasibility of the acquired in-process research and development had not yet been established and management determined that at that time the technology had no future alternative uses and accordingly, the value assigned to in-process research and development was immediately charged to the statement of operations.

The acquisition is considered immaterial to SEQUENOM's revenues and expenses during the year ending December 31, 2002, and accordingly no pro-forma information is provided. Axiom's financial results are incorporated into our consolidated financial information from September 1, 2002.

In September 2001, SEQUENOM completed the acquisition of Gemini Genomics, a public company based in the United Kingdom. Under the terms of the agreement, holders of Gemini Genomics ordinary shares received 0.2000 of a share of newly issued SEQUENOM common stock in exchange for each ordinary share of Gemini Genomics. Holders of Gemini Genomics American Depository Shares (ADSs) received 0.4000 of a share of newly issued SEQUENOM common stock in exchange for each Gemini Genomics ADS. As a result of this transaction, SEQUENOM issued approximately 13.0 million shares and assumed outstanding options and warrants, equivalent to approximately 1.2 million additional shares. The transaction was accounted for using the purchase method of accounting. The Company determined the purchase price of Gemini Genomics, which was acquired in September 2001, in accordance with EITF 99-12 which assigns a price to the shares issued based on the market price at the time of the announcement of the acquisition, which resulted in a purchase price of approximately $232.7 million, including transaction and integration costs of

approximately $23.0 million. Had the Company valued the acquisition at the date that the deal was consummated in late September, the purchase price would have been approximately $120 million. In connection with this transaction, the Company had an independent third party conduct a valuation of the intangible assets acquired in order to allocate the purchase price in accordance with Accounting Principles Board Opinion No. 16.

The total purchase price of $232.7 million was allocated as follows ($ in millions):

Net tangible assets acquired	$ 53.8
In-process research and development	24.9
Intangible assets	18.7
Long term deferred tax liability	(6.2)
Goodwill	141.5
	$232.7

The intangible assets are being amortized over their estimated useful lives of five years and are categorized as clinical data collections. The goodwill was not amortized in accordance with SFAS No. 142, but was reviewed upon adoption of SFAS No. 142 by the Company on January 1, 2002. This review was conducted by an independent third party and the Company recognized a one-time, non-cash charge of $116.9 million to reduce the carrying value of its goodwill. A further annual review of the carrying value of goodwill, carried out in the fourth quarter of 2002 by an independent third party, determined that the goodwill associated with SEQUENOM Pharmaceuticals was fully impaired, and was included in the goodwill impairment charge taken in the year ended December 31, 2002. At the time of acquisition, the technological feasibility of the acquired in-process research and development had not yet been established and management determined that at this time the technology has no future alternative uses and accordingly, the value assigned to in-process research and development was immediately charged to the statement of operations for the year ended December 31, 2001.

The following unaudited pro forma data reflects the combined results of operations of the Company and Gemini Genomics as if the acquisition had occurred on January 1, of the respective year (in thousands, except share and per share data):

	Years Ended December 31,	
	2001	2000
Revenues	$32,962	$ 10,159
Net loss	$(74,579)	$(49,958)
Net loss per share, basic and diluted	$ (2.00)	$ (1.41)
Weighted average shares outstanding	37,325,577	35,404,633

The above pro forma data does not reflect a $24.9 million in-process research and development charge that was recorded in September 2001.

4. Acquisition and Integration Costs

As of December 31, 2002, the Company had $3.9 million remaining in accrued acquisition costs, relating to the acquisitions of Gemini Genomics in 2001 and Axiom Biotechnologies in 2002. As of December 31, 2002, the remaining combined acquisition liability of approximately $3.9 million relates substantially to facility exit costs and employee severance costs. The amount accrued represents the portion of lease payments the Company expects to incur prior to subleasing or terminating its agreements relating to sites which have been determined to be in excess of the Company's needs. The Company expects that it may take from six months to a year, or possible longer, to exit the commitments related to these facilities. An integration charge of $3.0 million relating to the closure

of the SEQUENOM AB operations was recorded in 2002 and consisted primarily of book value of the assets at time of closure.

The activity in the years ended December 31, 2002 and 2001, respectively, was as follows ($ in millions):

	Balance at December 31, 2001	Additions to accrual for 2002 related to Axiom Biotechnologies acquisition	Amount charged to expense, related to closure of SEQUENOM AB	Deductions	Balance at December 31, 2002
Direct costs of the acquisition	$ 0.6	$0.3	$ –	$ (0.7)	$ 0.2
Costs to close facilities and exit lease commitments	5.4	0.2	3.0	(5.3)	3.3
Severance, retention and related employee charges	0.5	0.4	–	(0.6)	0.3
Contract termination costs	–	0.1	–	–	0.1
	$ 6.5	$ 1.0	$3.0	$ (6.6)	$ 3.9

Substantially all of the remaining $3.9 million balance at December 31, 2002 relates to the acquisition of Gemini Genomics.

($ in millions)

	Initial acquisition related accrual	Deductions	Balance at December 31, 2001
Direct costs of the acquisition	$12.3	$(11.7)	$0.6
Costs to close facilities	7.1	(1.7)	5.4
Severance, retention and related employee charges	3.6	(3.1)	0.5
	$23.0	$(16.5)	$6.5

5. Long-Term Debt

The Company has a credit agreement with a financial institution that provides for borrowings of up to $25.0 million. Any borrowings under the agreement will be secured by cash and cash equivalents and will bear interest at the institution's reference rate less 0.5%, or 3.42% and 4.25% at December 31, 2002 and 2001, respectively. As of December 31, 2002, and 2001, respectively, $10.8 million and $3.0 million was outstanding under this agreement. Repayments under this agreement are made in 36 monthly installments commencing three months after drawdown on the loan line. The final payments on existing debt will become due in March 2006.

The Company established an asset-backed loan line during 2002, that provides for borrowings up to $4.0 million. Any borrowings under the agreement will be secured over identified tangible fixed assets of the Company, and will bear interest at a blended rate of 9%. As of December 31, 2002, $3.4 million was outstanding under this agreement. Repayments under this agreement are made in between 36 and 42 monthly installments, dependent upon the asset backing the borrowing. The final payments on existing debt fall due in June 2006.

6. Commitments and Contingencies

Building Leases

The Company leases facilities in the United States, Germany, and the United Kingdom. In total, the Company leases space in six buildings under leases that expire from June 2002 to December 2015. Total rent expense under these leases was approximately $3.8 million, $4.3 million, and $1.4 million in 2002, 2001, and 2000, respectively.

Capital Equipment Leases

During 1998, the Company entered into a master equipment lease agreement providing for borrowings up to $2.1 million. Under the agreement, the lessor will purchase equipment that the Company will lease subject to equal monthly payments for a 42-month period. No further amounts are available for borrowing under this agreement.

During 2000, the Company entered into an additional master equipment lease agreement providing for borrowings up to $8.0 million. Under the agreement, the lessor will purchase the equipment that the Company will lease subject to quarterly payments for 14 quarters. At December 31, 2002, the Company had borrowed $1.9 million under the this agreement. No further amounts are available for borrowing under this agreement.

Equipment under capital leases is included in equipment and leasehold improvements, as follows:

	December 31,	
	2002	2001
	($ in thousands)	
Laboratory equipment	$ 3,616	$ 3,296
Leasehold improvements	34	34
Office furniture and equipment	217	217
	3,867	3,547
Less accumulated amortization	(3,173)	(2,379)
	$ 694	$ 1,168

Depreciation of assets held under capital lease is included within total depreciation expense in Note 2.

The following is a schedule of future minimum lease payments at December 31, 2002:

Year Ending December 31,	Capital Leases	Operating Leases
	($ in thousands)	
2003	$ 770	$ 4,289
2004	472	4,216
2005	59	4,248
2006	–	4,364
2007	–	4,496
Thereafter	–	34,291
	1,301	$55,904
Less amount representing interest	(80)	
Present value of minimum lease payments	1,221	
Less current portion	(713)	
Long-term capital lease obligations	$ 508	

The above leases expire at various dates through 2015. Certain leases contain extension, renewal and/or purchase options. Future operating lease commitments for leases have not been reduced by minimum sublease rentals aggregating $1.9 million.

Collaboration, Development, and Licensing Agreements

The Company enters into various arrangements with corporate partners, licensors, licensees, vendors and others, as a part of its strategy for the research, development, commercialization and distribution of some of its products. The success of these agreements is dependent upon the parties'

performance of their obligations as expected. It is uncertain if any revenue will be derived from any of the arrangements.

The Company has entered into license agreements allowing the Company to utilize certain patents rights. If these patents are used in connection with a commercial product sale, the Company will pay royalties based on a percentage of the related product revenues. Through December 31, 2002, the amount of royalties paid in connection with commercial product sales has not been material.

Litigation

In November 2001, we and certain of our current or former officers and directors were named as defendants in a class action shareholder complaint filed by Collegeware USA in the U.S. District Court for the Southern District of New York (Case No. 01-CV-10831). Similar complaints were filed in the same Court against hundreds of other public companies that conducted initial public offerings of their common stock in the late 1990s. In the complaint, the plaintiffs allege that our underwriters, certain of our officers and directors and we violated the federal securities laws because our registration statement and prospectus contained untrue statements of material fact or omitted material facts regarding the compensation to be received by and the stock allocation practices of the underwriters. The plaintiffs seek unspecified monetary damages and other relief. In October 2002, our officers and directors were dismissed without prejudice pursuant to a stipulated dismissal and tolling agreement with the plaintiffs. In February 2003, the Court dismissed the claim against us brought under Section 10(b) of the Exchange Act of 1934, without giving the plaintiffs leave to amend the complaint with respect to that claim. The Court, however, declined to dismiss the claim against us brought under Section 11 of the Securities Act of 1933. We deny all material allegations and intend to defend against the remaining claim vigorously.

In addition, from time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business.

7. Stockholders' Equity

Stockholder Rights Plan

On October 19, 2001, the Board of Directors of Sequenom, Inc. (the "Company") approved the adoption of a Stockholder Rights Plan (the "Plan"). Terms of the Plan provide for a dividend distribution of one preferred share purchase right (a "Right") for each outstanding share of common stock, par value $.001 per share (the "Common Shares"), of the Company. The dividend distribution of one preferred share purchase right was paid on November 5, 2001 (the "Record Date") to the stockholders of record on that date. Each Right entitles the registered holder to purchase, under certain circumstances, from the Company one one-hundredth of a share of Series A Junior Participating Preferred Stock, par value $.001 per share (the "Preferred Shares"), at a price of $85 per one one-hundredth of a Preferred Share (the "Purchase Price"), subject to adjustment. Each one hundredth of a Preferred Share has designations and powers, preferences and rights, and the qualifications, limitations and restrictions which make its value approximately equal to the value of a Common Share.

Stock Compensation Plans

The Company maintains several stock option plans under which the Company may grant incentive stock options and non-qualified stock options to employees, consultants and non-employee directors. Options vest and expire according to terms established at the grant date. Options generally vest over a period four years from the date of grant and expire ten years from the date of grant. The plans provide for the grant of an aggregate of 4,750,000 shares of common stock. Beginning

in 2001, the amount of authorized shares automatically increases by an amount equal to 4% of the outstanding common stock on the last trading day of the prior year, subject to an annual increase limitation of 2,000,000 shares.

The following summarizes all stock option transactions from January 1, 2000 through December 31, 2002.

Outstanding	Shares Subject to Options	Weighted-Average Exercise Price per Share
Outstanding at December 31, 1999	1,433,085	$ 1.87
Granted	925,000	54.83
Canceled	(236,629)	79.46
Exercised	(760,504)	1.48
Outstanding at December 31, 2000	1,360,952	$24.20
Options assumed in connection with acquisition of Gemini Genomics	1,194,110	17.26
Granted	1,091,700	12.78
Canceled	(1,446,215)	29.39
Exercised	(53,566)	1.67
Outstanding at December 31, 2001	2,146,981	$ 11.61
Options assumed in connection with acquisition of Axiom Biotechnologies	225,772	4.41
Granted	2,997,843	4.35
Canceled	(509,005)	9.97
Exercised	(210,943)	2.85
Outstanding at December 31, 2002	4,650,648	$ 7.24

In connection with the acquisition of Gemini Genomics, the outstanding options to purchase Gemini ordinary and ADS shares at varying prices were assumed by the Company for options to purchase Sequenom Common Stock at a weighted average exercise price of $17.26 per share. All options were fully vested upon completion of the transaction.

At December 31, 2002, 563,010 shares were available for future option grants and 5,213,658 shares of common stock were reserved for issuance upon exercise of options.

The weighted average grant-date fair value of options granted in 2002, 2001 and 2000 was $3.39, $9.97 and $37.31, respectively.

The following table summarizes information about options outstanding at December 31, 2002:

	Options Outstanding		Options Exercisable	
Range of Exercise Price	Number Outstanding	Weighted-Average Remaining Contractual Life	Number Exercisable and Vested	Weighted-Average Exercise Price
$0.05 - $ 3.53	936,005	8.04	436,321	$ 2.63
$3.70 - $ 6.02	2,264,720	7.98	1,122,313	$ 4.77
$6.38 - $35.00	1,449,923	8.03	996,621	$17.62
$0.05 - $35.00	4,650,648	8.02	2,555,255	$ 9.41

Option Exchange Program

On November 1, 2001, the Company initiated a voluntary stock option exchange program for its employees, officers and board members. As a result of a decline in the price of the Company's Common Stock during fiscal year 2001, the exercise prices associated with the majority of the

Company's outstanding stock options were higher than the market price of the Company's Common Stock. The Board of Directors determined that these options were not attractive or effective as an incentive to retain and motivate employees and were unlikely to be exercised. By offering employees, officers and board members the opportunity to exchange certain of their stock options, the Company intended to provide its employees with the benefit of holding stock options that over time may have a greater potential to increase in value, and thereby create better incentives for its employees to remain with the Company and to contribute to the attainment of its business and financial objectives and the creation of value for its stockholders.

Pursuant to the terms of the program, employees, officers and board members of the Company were offered the opportunity to exchange all outstanding Company's Common Stock with an exercise price equal or greater than $10.00 per share for replacement options to purchase shares of the Company's Common Stock at a new exercise price. The replacement options were granted on May 31, 2002 and have an exercise price of $4.89, the fair market value of the Company's Common Stock on that date. Each replacement option is subject to the same vesting schedule and has the same vesting commencement date as the option for which it was exchanged. Approximately 1.2 million of the 3.3 million options issued and outstanding at the time of the offer were exchanged.

Employee Stock Purchase Plan

In 1999, the Company adopted the 1999 Employee Stock Purchase Plan ("1999 ESPP"). As of December 31, 2002, the Company had reserved 701,857 shares of common stock for issuance under the 1999 ESPP. Beginning in 2001, the amount of authorized shares available under the 1999 ESPP automatically increase each January 1st by an amount equal to 1% of the outstanding common stock on the last trading day of the prior year, subject to an annual increase limitation of 500,000 shares. The 1999 ESPP will have a series of concurrent offering periods, each with a maximum duration of 24 months, however, no employee may participate in more than one offering period at a time. Employees may allocate up to 15% of their pay to purchase shares, limited to 1,000 shares per purchase period and $25,000 per calendar year. Shares are purchased semi-annually at 85% of the lower of the beginning or end of the period price. For the years ended December 31, 2002 and 2001, respectively, 101,754 and 50,422 shares were purchased by employees at an average price of $3.50 and $12.10 per share, respectively.

Warrants

In connection with the acquisition of Axiom Biotechnologies, the outstanding warrant to purchase 22,000 Axiom ordinary shares at an exercise price of $3.50 was adjusted to be exercisable for 4,604 shares of Sequenom Common Stock at an exercise price of $16.73 per share. This warrant has not been exercised and remains outstanding at December 31, 2002.

In connection with the acquisition of Gemini Genomics, the outstanding warrant to purchase 40,000 Gemini ordinary shares at an exercise price of £0.20 was adjusted to be exercisable for 8,000 shares of Sequenom Common Stock at an exercise price of $0.35 per share. This warrant was issued by Gemini in connection with a capital lease facility. This warrant has not been exercised and remains outstanding at December 31, 2002. This warrant expires on February 21, 2003.

In connection with the Series C Preferred Stock issued in May 1997, the Company issued warrants to purchase 106,508 shares of Series C Preferred Stock at an exercise price of $3.15 per share. These warrants expire in May 2007. As of December 31, 2002, 35,083 of these warrants remain outstanding.

Deferred Compensation

No deferred compensation was recorded during the years ended December 31, 2002 and 2001. The Company has recorded deferred compensation of $1.7 million in the year ended December 31, 2000, in connection with the grants of certain stock options to employees. Amortization of deferred compensation totaled approximately $0.4 million, $0.9 million, and $3.7 million during the years ended December 31, 2002, 2001 and 2000, respectively.

8. Income Taxes

The reconciliation of income tax computed at the Federal statutory tax rate to the provision (benefit) for income taxes is as follows:

	December 31,		
	2002	2001	2000
		($ in thousands)	
Tax at statutory rate	$(71,908)	$(21,921)	$(11,510)
State taxes, net of Federal benefit	(8,437)	(1,767)	(987)
Change in valuation allowance	31,321	15,547	11,442
Goodwill write-off	49,685	–	–
In-Process R&D write-off	–	8,722	–
Other	(1,970)	(581)	1,055
	$ (1,309)	$ –	$ –

The 2002 income tax benefit of $1.3 million is comprised of foreign deferred taxes.

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities are shown below. A valuation allowance of $85.7 million has been recorded, as realization of such assets is uncertain.

	December 31,	
	2002	2001
	($ in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 69,035	$ 46,091
Research and development credits	6,729	3,486
Capitalized research expenses	5,226	3,023
Other, net	4,748	1,711
Total deferred tax assets	85,738	54,311
Deferred tax liabilities:		
Intangible Assets	(4,911)	(6,220)
Valuation allowance	(85,738)	(54,311)
Net deferred tax assets (liabilities)	$ (4,911)	$(6,220)

At December 31, 2002, the Company has federal and state tax net operating loss carryforwards of approximately $145.9 million and $48.5 million, respectively. The difference between the federal and state tax loss carryforwards is attributable to the capitalization of research and development expenses for state tax purposes and the limitation on the California loss carryforwards. The federal tax loss carryforwards will begin to expire in 2009, unless previously utilized. Approximately $455,000 of the state tax loss carryforwards expired in 2002 and the state tax loss carry-forwards will continue to expire in 2003 unless previously utilized.

The Company also has German and United Kingdom (UK) net operating loss carryforwards of approximately $11.0 million and $34.0 million, respectively, which may be carried forward indefinitely.

Approximately $32.0 million of the UK net operating loss carry-forwards was acquired with the purchase of Gemini Genomics and is fully reserved by the valuation allowance. To the extent these UK net operating loss carryforwards are utilized, such benefit will be recorded as a purchase accounting adjustment.

The deferred tax asset includes a future tax benefit of approximately $0.7 million related to stock option deductions, which, if recognized, will be allocated to additional paid in capital.

The Company also has federal and state research and development tax credit carryforwards of approximately $4.3 million and $3.9 million, respectively. The federal research and development tax credit carryforwards will begin to expire in 2010 unless previously utilized.

Pursuant to Internal Revenue Code Sections 382 and 383, use of the Company's federal net operating loss and credit carryforwards may be limited due to a cumulative change in ownership of more than 50% within a three-year period.

Use of the Company's UK net operating loss carryforwards may be limited upon the occurrence of certain events such as the discontinuation or change in the nature or conduct of the business.

9. Savings and Pension Plans

The Company has a 401(k) savings plan covering most United States employees. In the United Kingdom the Company makes contributions to defined contribution pension plans. Under these plans, individual employees may make contributions to the plan, which can be matched by the Company in an amount determined by the Board of Directors or as determined by local statutes. The Company made matching contributions totaling approximately $0.3 million, $0.3 million and $0.1 million in 2002, 2001 and 2000, respectively.

10. Geographic Information

The Company has wholly-owned subsidiaries located in Germany and the United Kingdom and has customer and vendor relationships worldwide. The following table presents information about the Company by geographic area. There were no material amounts of transfers between geographic areas. Included in the consolidated balance sheets and consolidated statements of operations are the following domestic and foreign components at December 31, 2002, 2001, and 2000:

	December, 31,		
	2002	2001	2000
Current assets:			
United States	$ 105,090	$ 98,436	$149,860
Europe	8,170	60,830	2,942
Asia	1,083	4,299	1,213
	$ 114,343	$163,565	$ 154,014
Property, equipment and leasehold improvements, net:			
United States	$ 14,842	$ 23,479	$ 7,041
Europe	624	1,620	1,077
Asia	460	–	–
	$ 15,926	$ 25,099	$ 8,118
Other assets:			
United States	$ 22,339	$ 163,815	$ 4,130
Europe	–	3,902	–
	$ 22,339	$ 167,717	$ 4,130
Total assets:			
United States	$ 142,271	$285,730	$ 161,031
Europe	8,794	66,352	4,018
Asia	1,543	4,299	1,213
	$ 152,608	$ 356,381	$166,262
Revenues:			
United States	$ 18,599	$ 21,635	$ 6,503
Europe	6,447	4,520	2,099
Asia	5,839	4,580	1,435
	$ 30,885	$ 30,735	$ 10,037
Net loss:			
United States	$ (196,697)	$(46,024)	$ (24,196)
Europe	(3,396)	(10,859)	(2,320)
Asia	(5,601)	(5,749)	(6,370)
	$(205,694)	$ (62,632)	$(32,886)

11. Selected Quarterly Financial Data (unaudited)

(Dollars in thousands, except share and per share information)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total Year
2002					
Net sales	$ 8,559	$ 7,617	$ 6,829	$ 7,509	$ 30,514
Gross profit	3,767	3,301	2,727	3,245	13,040
Net income (loss) before cumulative effect of accounting change	(10,952)	(15,002)	(16,992)	(45,801)	(88,747)
Cumulative effect of accounting change	(116,947)	–	–	–	(116,947)
Net income (loss)	(127,899)	(15,002)	(16,992)	(45,801)	(205,694)
Net income (loss) per share, basic and fully diluted					
Net loss before cumulative effect of accounting change	$ (0.29)	$ (0.40)	$ (0.45)	$ (1.16)	$ (2.32)
Cumulative effect of accounting change	$ (3.12)	$ –	$ –	$ –	$ (3.07)
Net loss per share, basic and diluted	$ (3.41)	$ (0.40)	$ (0.45)	$ (1.16)	$ (5.39)
Shares used in calculated per share amounts Historical, basic and fully diluted	37,456,377	37,526,627	38,197,440	39,396,480	38,149,692
2001					
Net sales	$ 5,180	$ 7,319	$ 8,724	$ 9,243	$ 30,466
Gross profit	1,028	2,274	3,363	4,021	10,686
Net income (loss)	(7,030)	(8,691)	(34,433)	(12,478)	(62,632)
Net income (loss) per share					
Historical, basic and fully diluted	$ (0.29)	$ (0.36)	$ (1.37)	$ (0.33)	$ (2.25)
Shares used in calculated per share amounts Historical, basic and fully diluted	24,317,175	24,356,766	25,098,290	37,360,318	27,816,470
2000					
Net sales	$ 1,451	$ 1,807	$ 2,783	$ 3,659	$ 9,700
Gross profit	422	708	626	1,370	3,126
Net income (loss)	(14,324)	(5,644)	(5,399)	(7,519)	(32,886)
Net income (loss) per share					
Historical, basic and fully diluted	$ (0.85)	$ (0.23)	$ (0.22)	$ (0.31)	$ (1.46)
Shares used in calculated per share amounts Historical, basic and fully diluted	16,803,697	24,277,843	24,330,513	24,368,687	22,453,797

December 31, 2002

Schedule II – SEQUENOM, INC.

Valuation and Qualifying Accounts

Description	Balance at Beginning of Period	Charged to Costs and Expenses	Charged to Other Accounts	Deductions	Balance at End of Period
Year ended December 31, 2002:					
Allowance for doubtful accounts	$482	$ 156	$–	$ 69(1)	$569
Reserve for obsolete or excess inventory	$462	$1,055	$–	$407(2)	$1,110
Warranty reserve	$365	$ 537	$–	$ 510(3)	$392
Year ended December 31, 2001:					
Allowance for doubtful accounts	$ 45	$ 465	$–	$ 28(1)	$482
Reserve for obsolete or excess inventory	$ 87	$ 633	$–	$258(2)	$462
Warranty reserve	$ 189	$ 354	$–	$ 178(3)	$365
Year ended December 31, 2000:					
Allowance for doubtful accounts	$ –	$ 45	$–	$ –	$ 45
Reserve for obsolete or excess inventory	$ –	$ 290	$–	$203(2)	$ 87
Warranty reserve	$ –	$ 269	$–	$ 80(3)	$ 189

(1) Write off of uncollectible accounts

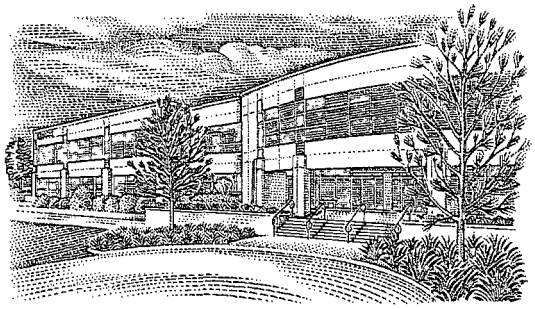
(2) Write off of obsolete or excess inventory

(3) Warranty items shipped to customers

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

We consent to the incorporated by reference in the Registration Statements (Form S-8 Nos. 333-102769, 333-99629 and 333-69706) of SEQUENOM, Inc., of our report dated February 25, 2003, with respect to the consolidated financial statements and Schedule 15(a) of Sequenom, Inc. included in the Annual Report (Form 10-K) for the year ended December 31, 2002.

ERNST & YOUNG LLP
San Diego, California
March 26, 2003



SEQUENOM is headquartered in San Diego, California, with additional operations in the United States, Europe and Asia.

EXECUTIVE MANAGEMENT

Toni Schuh, Ph.D.
President and Chief Executive Officer

Charles R. Cantor, Ph.D.
Chief Scientific Officer

Stephen L. Zaniboni
Chief Financial Officer

Andreas Braun, M.D., Ph.D.
Chief Medical Officer

Rick Episcopo
Executive Vice President of Operations

Jay Lichter, Ph.D.
Executive Vice President of Business Development

Richard Macdonald, Ph.D.
Executive Vice President of Bioinformatics and Information Technology

Paul J. Heaney, Ph.D.
Executive Vice President of Research and Technology

Michael Terry
Executive Vice President of Sales, Marketing and Support

BOARD OF DIRECTORS

Helmut Schühsler, Ph.D.
Chairman, Managing Partner, TVM Techno Venture Management

Prof. Ernst Günter Afting, M.D., Ph.D.
President, GSF-National Research Center for Environment and Health, Munich, Germany

Charles R. Cantor, Ph.D.
Chief Scientific Officer, SEQUENOM, Inc.

Michael Fitzgerald
Chairman, Shamrock International Holdings Limited

Harry F. Hixson, Jr., Ph.D.
Chairman and CEO, Elitra Pharmaceuticals

John Lucas
Healthcare Industry Advisor

Toni Schuh, Ph.D.
President and CEO, SEQUENOM, Inc.

Kris Venkat, Ph.D.
Chairman and CEO, Sundari Enterprises, Inc.

CORPORATE HEADQUARTERS

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f: 61 (07) 3845 3506

INDEPENDENT AUDITORS

Ernst & Young, LLP

LEGAL COUNSEL

Cooley Godward LLP, San Diego

REGISTRAR AND TRANSFER AGENT

American Stock Transfer & Trust Company
40 Wall Street
New York, NY 10005
t: 212 936 5100

ANNUAL MEETING

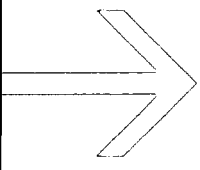
The annual meeting of stockholders will be held at:
10:00 am, May 30, 2003
SEQUENOM, Inc.
3595 John Hopkins Court
San Diego, CA 92121

FORM 10-K

A copy of the annual report to the Securities and Exchange Commission on Form 10-K may be obtained without charge by contacting Investor Relations. Quarterly earnings releases, corporate new releases and certain SEC filings are available at www.sequenom.com.

Design: Alden | Illustrations: Kevin Sprouls

SEQUENOM®



www.sequenom.com