2003 Annual Report

illumina®

Sentrix® 16-array BeadChip
Each array can genotype 1536 SNPs.
Dense geometry; 6-micron spacing.

Sentrix 8-sample BeadChip for Focused Expression
700 genes per sample.
20-micron feature-to-feature spacing.

Sentrix RefSeq BeadChip
Query 8 samples in parallel, 24,000 transcripts each, derived from RefSeq sequences.

Sentrix Whole Genome BeadChip
Six genomes on a single microarray.
Over 10 million features.

Sentrix Array Matrix
Microplate-compatible. 96 arrays in parallel. 50,000 features per array, with 1536-multiplex assay protocol.

The New Architecture for Genetic Analysis

2003 Highlights

In 2003, Illumina shipped the first of a developing family of products built on our New Architecture for Genetic Analysis. These products help researchers speed genetic discoveries that are essential for personalized medicine. As a result of this progress and the hard work of our employee teams, our revenue for 2003 exceeded $28 million, nearly three times the level of 2002.

We planted cornerstones for future success around the world in 2003, installing six genotyping BeadLabs at leading genomics centers in Asia, North America and Europe.

The BeadLab is a production laboratory that delivers on the promise of a turnkey system. In less than 30 days, we can convert empty lab space into an operation that generates over one million genotypes per day.

In 2003 we introduced the Sentrix® BeadChip, a flexible, highly configurable complement to our Sentrix Array Matrix. We design BeadChips to address various market opportunities by trading off the number of samples analyzed on each chip with the complexity of the analysis of each sample. BeadChips use the same manufacturing methods and infrastructure perfected for the fiber optic-based Array Matrix as well as identical genetic content and assay methods. This results in lower-cost manufacturing for Illumina while providing unequaled platform flexibility for our customers.

Our aggressive business plans require effective team execution across multiple disciplines and functional areas. Our teams have worked tirelessly to exceed our internal expectations and more importantly, those of our customers and investors. The following pages recap Illumina's 2003 performance.

Jay Flatley and John Stuelpnagel

MEETING AND EXCEEDING 2003 MILESTONES

- **Sign 15 Service Contracts**
  Signed 26 genotyping service agreements
- **Ship 5 Production-Scale BeadLabs**
  Shipped and installed 6 BeadLabs
- **Develop 100,000 Assays for the HapMap Project**
  Completed in Q4, 2003
- **Launch First Whole-Genome Oligo Set**
  Completed in Q1, 2003
- **Launch First Product for Gene Expression Profiling**
  Launched Focused Gene Expression Program in Q3, 2003

Commercial

The market for SNP genotyping and gene expression products exceeds $1 billion annually and is growing robustly, fueled by expanded use of microarray methods to study genetic variation and function. Illumina technologies are ideally suited to address research initiatives that increasingly require the generation of large data sets—the product of large numbers of samples and high complexity per sample. For example, the International HapMap Project, for which Illumina is both a Principal Investigator and a supplier, will generate in excess of 250 million data points over approximately two years. This project will serve as a catalyst for new genotyping projects and will help standardize SNP-based pharmacogenomics initiatives.

In 2003, we installed BeadLabs at six of the world's most respected research institutions: The Wellcome Trust Sanger Institute, Shanghai's National Center for Biochip Technology, The Eli and Edyth L. Broad Institute (formerly the Whitehead Institute/MIT Center for Genome Research), Genome Quebec Innovation Centre, Human Genome Center of the Institute of Medical Science of the University of Tokyo, and Johns Hopkins University/Center for Inherited Disease Research (CIDR). Strategically, these BeadLab placements give Illumina the ability to build relationships with the thought leaders of our industry.

In 2003, we installed BeadLabs at six of the world's most respected research institutions.

Tristan Orpin, *Sales*; Susan Eddins, *Marketing*; Kirk Malloy, *Customer Solutions*

Longer term, we believe that the largest opportunity for SNP genotyping will be the broader market of core laboratories and individual researchers who require more moderate throughput levels. The BeadStation 500G was announced in November 2003 to address this emerging opportunity. Built on the same technology platform as BeadLab, the BeadStation features a streamlined GoldenGate™ assay and flexible multiplex levels, enabling researchers to achieve low-cost, high-accuracy genotyping without the use of robotics or information management systems. We began BeadStation shipments in March 2004.

In September 2003, we entered the gene expression market with the launch of our focused array program. This flexible program allows customers to order standard or custom gene content (to query a specific organism or disease state) and to use the content interchangeably on two Sentrix® platforms: our 96-sample Array Matrix and our 8-sample BeadChip.

In January 2004, we announced our plan to enter the whole-human-genome expression market with two new Sentrix BeadChip configurations. The first BeadChip analyzes six samples or replicates (48,000 transcripts each) on a single chip, while the second BeadChip generates expression data for eight samples (24,000 RefSeq transcripts) in parallel on one chip. These new BeadChips have the potential to dramatically reduce the cost of whole-genome expression analysis, allowing researchers to expand the scale and reproducibility of biological experimentation.

Collectively, these new products form the base for an integrated suite of products that can readily expand to accommodate additional market-driven requirements.

On the service side, we signed 26 genotyping service agreements, reflecting the throughput and consistently high data quality of our internal scientific operations. Additionally, Illumina's Oligator® oligonucleotide synthesis business continued to gain market share by focusing on researchers engaged in large projects and major accounts that require volume quantities of high-quality oligos.

In 2003, we nearly doubled the size of our Sales, Marketing and Customer Solutions organizations to support an expanding portfolio of products and to broaden our global coverage and customer service levels. We opened a subsidiary in Japan and a new facility in Singapore, along with distributors and support personnel in China and Australia.

These new BeadChips have the potential to dramatically reduce the cost of whole-genome expression analysis, allowing researchers to expand the scale and reproducibility of biological experimentation.

Research and Engineering

Our success as a company is critically dependent on our ability to effectively convert projects in our development pipeline into innovative new products that provide value to the markets and customers we serve. Our research and development teams represent a core asset with expertise across a broad range of disciplines including biochemistry, bioinformatics, molecular biology, genetics, optical engineering and process engineering. During 2003, we invested considerable energy in optimizing our processes for organizing these core resources into high-performance, cross-functional teams that can rapidly define and deliver new products. While we continue our focus on improving these processes, we feel great about the progress we have made and the level of performance we have achieved.

During the year, our teams delivered critical products to the market including the BeadLab, the BeadChip and the Focused Array products. These teams also enhanced the core technologies we use across multiple product lines, including the BeadArray Reader and the multiplex levels of our assays and arrays.

With our core array platforms fully deployed in manufacturing, we will now concentrate product development resources on new applications and assays that will leverage our technology infrastructure and enhance the capabilities of our growing installed base.

Michal Lebl, *Automation*; Bob Kain, *Engineering*; David Barker, *Research & Development*

Our research and development teams represent a core asset with expertise across a broad range of disciplines.

Operations

Our scientific operations and manufacturing groups focus on the efficient production of high-quality products and services. In 2003, the company made tremendous progress in reducing costs, improving yields and increasing capacity across all our product lines, including arrays, oligos, software, systems and genotyping data.

Central to this progress is a mission-critical set of enterprise information and LIMS (Laboratory Information Management) systems that allow us to manage inventory, schedule manufacturing activity, and integrate data and sample flows both seamlessly and cost effectively.

Illumina continues to be the only microarray manufacturer that is able to ensure the quality of every feature in every array *before* customers ever use our products. Increasingly, the customers we serve are recognizing our superior array performance and data quality, and rewarding us with repeat purchases and new system sales.

As part of our participation in the International HapMap Project, we delivered approximately 100,000 assays in 2003. Illumina's technology continues to demonstrate superior results across all of our installed sites. In 2004 we expect to generate, along with our HapMap partners, approximately 400,000 additional assays as part of this seminal international effort. This library of assays has the potential to deliver value to life science researchers long after the HapMap Project draws to an end.

Arnold Oliphant, *Scientific Operations*; Dave Douglas, *Manufacturing*

Illumina continues to be the only microarray manufacturer that is able to ensure the quality of every feature in every array *before* customers ever use our products.

Corporate

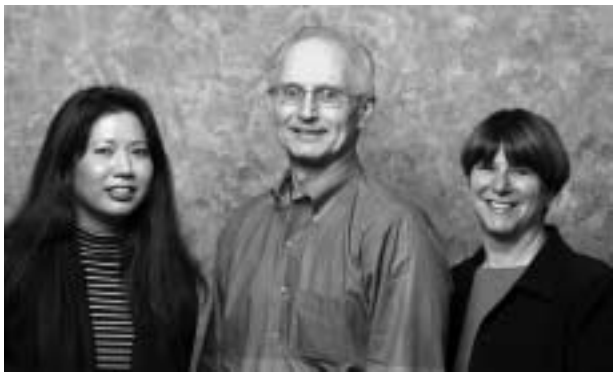
In 2003, Illumina reported revenues of $28.0 million, a 179% increase over the previous year, and a net loss of $27.1 million, or $0.85 per share, compared to a net loss of $40.3 million, or $1.31 per share in 2002. Approximately 50% of our sales were outside the United States, including four of our six BeadLab installations. Cash, investments and long-term restricted cash at year end totaled $45.1 million.

As a result of manufacturing efficiencies and operating leverage, we improved gross margins while continuing to lower market pricing for oligos, arrays, reagents and services. Expense growth was directed toward the build-out of our sales, marketing and customer service infrastructure. As a result of our ongoing litigation with Applied Biosystems, we incurred higher legal costs.

Shortly after year end, we appointed Daniel Bradbury to our Board of Directors. Dan's international pharmaceutical experience will be particularly useful as we develop strategies for deploying our products and services more broadly in the drug discovery and development process.

As a sign of our continued ability to innovate, our patent estate grew to 30 issued and 67 allowed or pending domestic applications. These patents fortify our intellectual property position.

Looking forward to 2004, we will continue to make substantial investments in developing, manufacturing and launching an expanding product portfolio. As we build our installed base, our revenue growth will be driven increasingly by consumable sales. We expect that cash burn in 2004 will be less than $15 million.



Nicky Espinosa, *Intellectual Property*; Tim Kish, *Finance*; Paulette Cabral, *Human Resources*

Our dispute with Applied Biosystems regarding our previous genotyping collaboration agreement will continue in 2004. In December 2003 we notified Applied Biosystems that we terminated our joint development agreement and the San Diego Superior Court directed Applied Biosystems and Illumina to resolve the contract dispute in a binding arbitration procedure. While a definitive schedule has not yet been set, we believe that the arbitration process could be completed as early as September 2004.

We will continue to make substantial investments in developing, manufacturing and launching an expanding product portfolio.

Looking Ahead

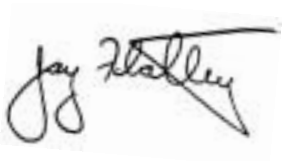
As 2004 unfolds, we remain firmly committed to our strategy of building a comprehensive offering of scalable, multi-application systems. At the foundation of our systems are the Sentrix Array Matrix and BeadChip, the BeadArray Reader, and Oligator® DNA synthesis capability. The BeadLab and BeadStation systems can be scaled in multiple dimensions, providing customers the flexibility to perform SNP genotyping or gene expression experiments on the same platform, with content ranging from whole genomes to focused sets, at various levels of throughput and automation.

We are looking forward this year to full-scale production and shipment of BeadStations and whole-genome expression arrays — extending the benefits of our core technology to the broad genomics community around the world.

2004 will be a financially pivotal year. Our goal is to grow revenue substantially and to approach cash flow breakeven by year end. To achieve these goals, we will need to expand both our customer base and the reach of our commercial organization.

Although we will be selling directly against large companies with greater resources than our own, we believe that our clear customer focus and value proposition will continue to differentiate us. Our products have been developed collaboratively with many of our current customers and we have a keen understanding of their needs. These ongoing relationships will enable us to quickly recognize and adapt to changing market conditions. Concurrent with anticipated sales growth, we are building our customer support teams to ensure the highest level of satisfaction and loyalty.

Our employee team is strong. With the support of stakeholders and together with customers, we will achieve our goal of enabling personalized medicine, while building a scientifically and economically successful company. Our growing community shares in this mission. Thanks for joining us in our pursuit.



JAY FLATLEY
President and Chief Executive Officer

KEY MILESTONES FOR 2004

- **Sign 20 Genotyping Service Contracts**
- **Ship 20 BeadStations and BeadLabs**
- **Develop at least 400,000 Assays with our HapMap Partners**
- **Ship Sentrix Whole-Genome Expression BeadChips**
- **Achieve Operating Cash Burn less than $15 Million**

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 28, 2003

or

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

For the transition period from to .

Commission file number: 000-30361

Illumina, Inc.

(Exact name of Registrant as Specified in Its Charter)

Delaware	**33-0804655**
(State or other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification No.)*
9885 Towne Centre Drive, San Diego, California	**92121**
(Address of Principal Executive Offices)	*(zip code)*

Registrant's telephone number, including area code: (858) 202-4500

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

Securities registered pursuant to Section 12(g) of the Act:

Common Stock, $.01 par value
(Title of class)

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

As of January 31, 2004, there were 32,900,523 shares of the Registrant's Common Stock outstanding. The aggregate market value of the Common Stock held by non-affiliates of the Registrant (based on the closing price for the Common Stock on the Nasdaq National Market on June 30, 2003) was approximately $56,230,576. This amount excludes an aggregate of 12,673,530 shares of common stock held by officers and directors and each person known by the Registrant to own 10% or more of the outstanding common stock. Exclusion of shares held by any person should not be construed to indicate that such person possesses the power, direct or indirect, to direct or cause the direction of management or policies of the Registrant, or that such person is controlled by or under common control with the Registrant.

DOCUMENTS INCORPORATED BY REFERENCE

Certain exhibits filed with the Registrant's prior registration statements and reports under the Securities Exchange Act of 1934 are incorporated herein by reference into Part IV of this Report.

(This page intentionally left blank)

ILLUMINA, INC.

FORM 10-K
For the Fiscal Year Ended December 28, 2003

TABLE OF CONTENTS

This Annual Report on Form 10-K may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934. These statements relate to future events or our future financial performance. We have attempted to identify forward-looking statements by terminology including ''anticipates,'' ''believes,'' ''can,'' ''continue,'' ''could,'' ''estimates,'' ''expects,'' ''intends,'' ''may,'' ''plans,'' ''potential,'' ''predicts,'' ''should'' or ''will'' or the negative of these terms or other comparable terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under ''Factors Affecting Operating Results,'' contained in Item 7 — ''Management's Discussion and Analysis of Financial Condition and Results of Operation,'' that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels or activity, performance or achievements expressed or implied by these forward-looking statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We are not under any duty to update any of the forward-looking statements after the date we file this Annual Report on Form 10-K or to conform these statements to actual results, unless required by law.

Illumina®, Array of Arrays™, BeadArray™, GoldenGate™, Sentrix® and Oligator® are our trademarks. This report also contains brand names, trademarks or service marks of companies other than Illumina, and these brand names, trademarks and service marks are the property of their respective holders.

Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports are available free of charge on our website, *www.illumina.com.* Such reports are made available as soon as reasonably practicable after filing with the Securities and Exchange Commission.

PART I

Item 1. *Business.*

Overview

We are a leading developer of next-generation tools for the large-scale analysis of genetic variation and function. Understanding genetic variation and function is critical to the development of personalized medicine, a key goal of genomics. Our tools provide information that could be used to improve drugs and therapies, customize diagnoses and treatment, and cure disease.

Completion of the sequencing of the human genome will drive demand for tools that can assist researchers in processing the billions of tests necessary to convert raw genetic data into medically valuable information. This requires functional analysis of highly complex biological systems, involving a scale of experimentation not practical using currently available tools and technologies. Using our technologies, we have developed a comprehensive line of products that can address the scale of experimentation and the breadth of functional analysis required to help achieve the goals of molecular medicine.

Our patented BeadArray technology uses microscopic beads randomly deposited in wells to achieve a level of miniaturization that allows for a new scale of experimentation. A microarray is a collection of miniaturized test sites arranged on a surface that permits many tests, or assays, to be performed in parallel. Our arrays allow simultaneous processing of many samples in parallel, achieving throughput we believe to be significantly beyond the capability of any other technology currently on the market. We assemble our arrays using relatively inexpensive materials. Our proprietary manufacturing process allows us to easily adapt the arrays to a broad range of applications, including both genotyping and gene expression. These characteristics allow us to create next-generation arrays with a unique combination of high throughput, cost effectiveness and flexibility. In addition, our complemen-

tary Oligator technology permits parallel synthesis of the millions of different pieces of DNA necessary to perform large-scale genetic analysis on arrays.

We provide both products and services that utilize our proprietary technologies. During 2001, we launched our commercial genotyping service product line which combines our BeadArray technology with an automated, laboratory information management system, or LIMS, controlled process to provide high throughput identification of the most common form of genetic variation, known as single nucleotide polymorphisms, or SNPs. We also began the sale of custom synthesized pieces of DNA called oligonucleotides, or oligos using our proprietary Oligator technology.

In the third quarter of 2002, we announced the launch of our production scale BeadLab genotyping system. This integrated turnkey system is built around our proprietary BeadArray technology. Included in the system are the BeadArray Reader, GoldenGate assay protocols, LIMS and analytical software, fluid-handling robotics, and access to Sentrix arrays and reagent kits for analyzing genetic sequences. Our Sentrix array is a collection of individual arrays arranged in a pattern compatible with standard microtiter plates, our reagent kit uses highly multiplexed GoldenGate assay protocols which allow up to 1536 SNPs to be analyzed at one time in a sample and our BeadArray Reader is a proprietary scanner used to read the results of the experiments captured on our arrays. Our genotyping system is based on the production laboratory that has been operational in our genotyping service product line since 2001. When installed, the BeadLab genotyping system is able to routinely produce up to 1.4 million genotypes per day. As of the end of February 2004, we have installed six BeadLab genotyping systems.

In the fourth quarter of 2002, we were named the largest U.S. participant in the $100 million International HapMap Project funded by the National Institutes of Health. This project is an internationally funded successor project to the Human Genome Project that will help identify a map of genetic variations that may be used to perform disease-related research. This map of the human genome will allow more rapid and efficient large-scale genetic association studies aimed at discovering variants contributing to human disease and differential response to drug treatments. We are one of five funded U.S. participants in a worldwide initiative that includes research groups in Canada, China, Japan, Nigeria and the United Kingdom. We will be directly responsible for screening over 15% of the assays in the project. This effort leverages our Oligator DNA synthesis capability and the production-scale throughput of our genotyping services operation. Our BeadLab system is being used by organizations responsible for creating over 60% of the assays in this project.

In the first quarter of 2003, we completed the installation of and recorded revenue for our first BeadLab high-throughput SNP genotyping system. We installed and recorded revenue for a second BeadLab in the second quarter of 2003, two additional BeadLabs in the third quarter of 2003 and a fifth and sixth BeadLab system in the fourth quarter of 2003.

In the second quarter of 2003, we announced the launch of a new microarray format, the Sentrix BeadChip, which is expected to significantly expand market opportunities for our BeadArray technology and provide increased experimental flexibility for life science researchers.

In the third quarter of 2003, we announced the launch of a gene expression product line on both the Sentrix Array Matrix and the Sentrix BeadChip that will allow researchers to analyze a focused set of genes across eight to 96 samples on a single microarray.

In the fourth quarter of 2003, we announced the launch of a benchtop SNP genotyping system, the BeadStation, for performing medium scale genotyping using our technology. The BeadStation includes our BeadArray Reader, genotyping analysis software and GoldenGate assay reagents and is designed to match the throughput requirements and variable automation needs of individual research groups and core labs. This system is expected to be available for shipment in the second quarter of 2004.

In the first quarter of 2004, we announced the launch of two new Sentrix BeadChips for whole-genome gene expression. These BeadChips are designed to enable high-performance, cost-effective,

whole-genome expression profiling of multiple samples on a single chip, resulting in a dramatic reduction in cost of whole-genome expression analysis while allowing researchers to expand the scale and reproducibility of large-scale biological experimentation.

We are seeking to expand our customer base for our BeadArray technology; however, we can give no assurance that our sales efforts will continue to be successful.

We were incorporated in California in April 1998. We reincorporated in Delaware in July 2000. Our principal executive offices are located at 9885 Towne Centre Drive, San Diego, California 92121. Our telephone number is (858) 202-4500.

Industry Background

Genetic Variation and Function

Every person inherits two copies of each gene, one from each parent. The two copies of each gene may be identical, or they may be different. These differences are referred to as genetic variation. Examples of the physical consequences of genetic variation include differences in eye and hair color. Genetic variation can also have important medical consequences, including predisposition to disease and differential response to drugs. Genetic variation affects diseases, including cancer, diabetes, cardiovascular disease and Alzheimer's disease. In addition, genetic variation may cause people to respond differently to the same drug. Some people may respond well, others may not respond at all, and still others may experience adverse side effects. The most common form of genetic variation is a Single Nucleotide Polymorphism, or SNP. A SNP is a variation in a single position in a DNA sequence. It is estimated that the human genome contains between three and six million SNPs.

While in some cases a single SNP will be responsible for medically important effects, it is now believed that the genetic component of most major diseases is the result of the interaction of many SNPs. Therefore, it will be important to investigate many SNPs together in order to discover medically valuable information.

Current efforts to understand genetic variation and function have primarily centered around SNP genotyping and gene expression profiling.

SNP Genotyping

SNP genotyping is the process of determining which SNPs are present in each of the two copies of a gene, or other portion of DNA sequence, within an individual or other organism. The use of SNP genotyping to obtain meaningful statistics on the effect of an individual SNP or a collection of SNPs, and to apply that information to clinical trials and diagnostic testing, will require the analysis of millions of SNP genotypes and the testing of large populations for each disease. For example, a single large clinical trial could involve genotyping 200,000 SNPs per patient in 1,000 patients, thus requiring 200 million assays. Using available technologies, this scale of SNP genotyping is both impractical and prohibitively expensive.

Large-scale SNP genotyping will be used for a variety of applications, including genomics-based drug development, clinical trial analysis, disease predisposition testing, and disease diagnosis. SNP genotyping can also be used outside of healthcare, for example in the development of plants and animals with desirable commercial characteristics. These markets will require billions of SNP genotyping assays annually.

Gene Expression Profiling

Gene expression profiling is the process of determining which genes are active in a specific cell or group of cells and is accomplished by measuring mRNA, the intermediary between genes and proteins. Variation in gene expression can cause disease, or act as an important indicator of disease or predisposition to disease. By comparing gene expression patterns between cells from different

environments, such as normal tissue compared to diseased tissue or in the presence or absence of a drug, specific genes or groups of genes that play a role in these processes can be identified. Studies of this type, used in drug discovery, require monitoring thousands, and preferably tens of thousands, of mRNAs in large numbers of samples. Once a smaller set of genes of interest has been identified, researchers can then examine how these genes are expressed or suppressed across numerous samples, for example, within a clinical trial. The high cost of current gene expression methods has limited the development of the gene expression market.

Once gene expression patterns have been correlated to specific diseases, gene expression profiling is expected to become an important diagnostic tool. Diagnostic use of expression profiling tools is anticipated to grow rapidly with the combination of the sequencing of various genomes and the availability of more cost-effective technologies.

Our Technologies

BeadArray Technology

We have developed a proprietary array technology that enables the large-scale analysis of genetic variation and function. Our BeadArray technology combines microscopic beads and a substrate in a simple proprietary manufacturing process to produce arrays that can perform many assays simultaneously. Our BeadArray technology provides a unique combination of high throughput, cost effectiveness, and flexibility. We achieve high throughput with a high density of test sites per array and our ability to format arrays in either a pattern arranged to match the wells of standard microtiter plates or in various configurations in the format of standard microscope slides. We maximize cost effectiveness by reducing consumption of expensive reagents and valuable samples, and from the low manufacturing costs associated with our complementary technologies. Our ability to vary the size, shape and format of the well patterns and to create specific bead pools, or sensors, for different applications provides the flexibility to address multiple markets and market segments. We believe that these features will enable our BeadArray technology to become a leading platform for the emerging high-growth markets of SNP genotyping and gene expression.

Our proprietary BeadArray technology combines microwells etched into a substrate and specially prepared beads that self-assemble into an array. We have deployed our BeadArray technology in two different formats, the Array Matrix and the BeadChip. Our first bead-based product was the Array Matrix which incorporates fiber optic bundles. We have the fiber optic bundles manufactured to our specifications, which we cut into lengths of less than one inch. Each bundle contains approximately 50,000 individual fibers and 96 of these bundles are placed into an aluminum plate, which forms an Array Matrix. BeadChips are fabricated in microscope slide-shaped sizes with varying numbers of sample sites per slide. Both formats are chemically etched to create tens of thousands of wells for each sample site.

In a separate process, we create sensors by affixing a specific type of molecule to each of the billions of microscopic beads in a batch. We make different batches of beads, with the beads in a given batch coated with one particular type of molecule. The particular molecules on a bead define that bead's function as a sensor. For example, we create a batch of SNP sensors by attaching a particular DNA sequence to each bead in the batch. We combine batches of coated beads to form a pool specific to the type of array we intend to create. A bead pool one milliliter in volume contains sufficient beads to produce thousands of arrays. One of the advantages of this technology is that it allows us to create universal arrays for SNP genotyping. All of our SNP genotyping arrays are manufactured with the same set of sensors. This allows us to manufacture one type of genotyping array, and by varying the reagent kit, still be able to use it to test for any combination of SNPs.

To form an array, a pool of coated beads is brought into contact with the array surface where they are randomly drawn into the wells, one bead per well. The tens of thousands of beads in the wells comprise our BeadArray. Because the beads assemble randomly into the wells, we perform a final procedure called decoding in order to determine which bead type occupies which well in the array. We

employ several proprietary methods for decoding, a process that requires only a few steps to identify all the beads in the array. One beneficial by-product of the decoding process is a validation of each bead in the array. This quality control test characterizes the performance of each bead and can identify and eliminate use of any empty wells. We ensure that each bead type on the array is sufficiently represented by having multiple copies of each bead type. This improves the reliability and accuracy of the resulting data by allowing statistical processing of the results of identical beads.

One performs an experiment on the BeadArray matrices by preparing a sample, such as DNA from a patient, and introducing it to the array. The design features of our Array Matrix allow it to be simply dipped into a solution containing the sample, whereas our BeadChip allows processing of samples on a slide. The molecules in the sample bind to their matching molecules on the coated bead. The BeadArray Reader detects the matched molecules by shining a laser on the fiber optic bundle or on the BeadChip. Since the molecules in the sample have a structure that causes them to emit light in response to a laser, detection of a binding event is possible. This allows the measurement of the number of molecules bound to each coated bead, resulting in a quantitative analysis of the sample.

Oligator Technology

Genomic applications require many different short pieces of DNA that can be made synthetically, called oligonucleotides. For example, SNP genotyping typically requires three to four different oligonucleotides per assay. A SNP genotyping experiment analyzing 10,000 SNPs may therefore require 30,000 to 40,000 different oligonucleotides, contributing significantly to the expense of the experiment.

We have designed our proprietary Oligator technology for the parallel synthesis of many different oligonucleotides to meet the requirements of large-scale genomics applications. We believe that our Oligator technology is substantially more cost effective and provides higher throughput than available commercial alternatives. Our synthesis machines are computer controlled and utilize many robotic processes to minimize the amount of labor used in the manufacturing process. Each of these synthesizers can produce up to 3072 oligos in parallel, using very small amounts of material. We believe both of these attributes are substantial improvements over other existing technologies.

Key Advantages of Our BeadArray and Oligator Technologies

We believe that our BeadArray and Oligator technologies provide distinct advantages, in a variety of applications, over competing technologies, by creating cost-effective, highly miniaturized arrays with the following advantages:

High Throughput. The miniaturization of our BeadArray technology provides significantly greater information content per unit area than any other array known to us. To further increase throughput, we have formatted our Arrays in a pattern arranged to match the wells of standard microtiter plates, allowing throughput levels of up to 150,000 unique assays per microtiter plate, as well as the use of laboratory robotics to speed process time. The Oligator's parallel synthesis capability allows us to manufacture the diversity of oligonucleotides necessary to support large-scale genomic applications.

Cost Effectiveness. Our BeadArray products substantially reduce the cost of experiments as a result of our proprietary manufacturing process and our ability to capitalize on cost reductions generated by advances in fiber optics, digital imaging and bead chemistry. In addition, these products require smaller reagent volumes than other array technologies, and therefore reduce reagent costs. Our cost-effective Oligator technology further reduces reagent costs, as well as the cost of coating beads.

Flexibility. A wide variety of conventional chemistries are available for attaching different molecules, such as DNA, RNA, proteins, and other chemicals to beads. By using beads, we are able to take advantage of these chemistries to create a wide variety of sensors, which we assemble into arrays using the same proprietary manufacturing process. In addition, we can have fiber optic bundles and

BeadChips manufactured in multiple shapes and sizes with wells organized in various arrangements to optimize them for different markets and market segments. In combination, the use of beads and etched wells provides the flexibility and scalability for our BeadArray technology to be tailored to perform many applications in many different market segments, from drug discovery to diagnostics. Our Oligator technology allows us to manufacture a wide diversity of lengths and quantities of oligonucleotides.

Quality. The high density of beads in each array enables us to have multiple copies of each individual bead type. We measure the copies simultaneously and combine them into one data point. This allows us to make a comparison of each bead against its own population of identical beads, which permits the statistical calculation of a more reliable and accurate value for each data point. Finally, the manufacture of the array includes a proprietary decoding step that also functions as a quality control test of every bead on every array, improving the overall quality of the data.

Our Strategy

Our goal is to make our BeadArray platforms the industry standard for products and services utilizing array technologies. We plan to achieve this by:

- focusing on emerging high-growth markets;
- rapidly commercializing our BeadLab, BeadStation, Sentrix and BeadChip products;
- expanding our technologies into multiple product lines and market segments; and
- strengthening our technological leadership.

Products and Services

The first implementation of our BeadArray technology, the Sentrix Array Matrix, is a disposable matrix with 96 fiber optic bundles arranged in a pattern that matches the standard 96-well microtiter plate. Each fiber optic bundle performs more than 1,500 unique assays. Therefore, one Sentrix array can perform nearly 150,000 individual assays simultaneously, more than any other array system known to us. The BeadChip, introduced in 2003, is fabricated in multiple configurations to support multiple applications and scanning technologies.

We have provided genotyping services using our proprietary BeadArray technology since 2001. In addition, we have developed our first genotyping and gene expression products based on this technology. These products include disposable Sentrix Arrays and BeadChips, GoldenGate reagent kits for SNP genotyping and BeadArray Reader scanning instruments.

SNP Genotyping

In 2001, we introduced the first commercial application of our BeadArray technology by launching our SNP genotyping services product line. Since this launch we have had peak days in which we operated at two million genotypes per day based on individual samples. To our knowledge, no other genotyping platform can achieve comparable levels of throughput while delivering such high accuracy and low cost.

We designed our first consumable BeadArray product, the Sentrix Array Matrix, for SNP genotyping. The Sentrix Array Matrix uses a universal format that allows it to analyze any set of SNPs. We have also developed reagent kits based on GoldenGate assay protocols and the BeadArray Reader, a laser scanner, which is used to read our array products. These components, combined with LIMS, standard operating procedures and analytical software and fluid handling robotics comprise our BeadLab SNP genotyping system. This production scale system was commercialized in late 2002 and when installed, the genotyping system can routinely produce up to 1.4 million genotypes per day.

In January 2003, we announced the availability of two assay sets, one for genetic linkage analysis and the other for fine chromosomal or whole-genome mapping. These standard products have been deployed in our genotyping services operation and are also sold to customers who use our SNP genotyping system. Genetic linkage analysis can help identify chromosomal regions with potential disease associations across a related set of samples. Fine mapping provides dense genotyping and may enable target gene identification related to a specific disease.

In November 2003, we announced the BeadStation, a system for performing moderate scale genotyping designed to match the throughput requirements of individual research groups and core labs. The BeadStation includes our BeadArray Reader, genotyping analysis software and GoldenGate assay reagents and will initially support a high-density version of our BeadChip. The Sentrix BeadChip allows simultaneous processing of 16 samples and uses identical content as the Sentrix Array Matrix.

Gene Expression Profiling

In September 2003, we introduced our focused set gene expression products on both the Sentrix Array Matrix and Sentrix BeadChip platforms. For high-throughput projects, our system includes a BeadArray Reader for imaging Sentrix Array Matrices, a hybridization chamber and software for data extraction. For research projects that require moderate throughput, a version of the Sentrix BeadChip analyzes eight samples in parallel and can be scanned on a portion of the installed base of Axon Instruments' GenePix™ scanners. In addition, we have developed standard gene expression products for each of the human, mouse and arabidopsis genomes.

In January 2004, we announced two whole-genome gene expression BeadChip products. Both products allow whole-genome expression profiling of multiple samples on a single chip and are imaged using our BeadArray Reader. The first BeadChip is designed to analyze six discrete whole-human-genome samples on one chip, interrogating in each sample approximately 48,000 transcripts from the estimated 30,000 genes in the human genome. The second BeadChip product analyzes eight samples in parallel against the roughly 22,000 genes represented in the consensus RefSeq database, a well-characterized whole-genome subset used broadly in genetic analysis. We expect that the new whole-genome gene expression BeadChips will dramatically reduce the cost of whole-genome expression analysis, allowing researchers to expand the scale and reproducibility of large-scale biological experimentation.

Scanning Instrumentation

We have developed the BeadArray Reader which is an instrument that uses a laser to read the results of experiments that are captured on our Sentrix Array Matrices and BeadChips, and is part of both our production scale BeadLab SNP genotyping laboratory and our benchtop BeadStation system. This scanning equipment was designed to be used in all areas of genetic analysis that use our Sentrix arrays.

High-Throughput Synthesis

We have put in place an oligonucleotide manufacturing facility that currently has the capability of producing approximately 20 million oligonucleotides per year. In addition to their use to coat beads, these oligonucleotides are components of the reagent kits for our BeadArray products and are used for assay development. Because our production capacity exceeds our internal needs, we began to offer oligonucleotides for sale to high volume users in 2001. We provide oligonucleotides in a wide range of lengths and in several scales, with the ability to add many types of modifications. We offer a range of quality control options and have implemented a laboratory information management system to control much of the manufacturing process. In February 2003, we introduced the first standard product offerings in our Oligator product line, a whole-genome oligonucleotide reference set designed and optimized for spotted gene expression microarrays. We believe our Oligator technology is more cost

effective than competing technologies, which has allowed us to market our oligonucleotides under a price leadership strategy while still achieving attractive gross margins.

Partnerships and Collaborations

In November 1999, we entered into a joint development agreement with Applied Biosystems, a Division of Applera Corporation, under which the companies would jointly develop a SNP genotyping system that would combine our BeadArray™ technology with Applied Biosystems' assay chemistry and scanner technology. Under this agreement, we were primarily responsible for developing and manufacturing the arrays and Applied Biosystems was responsible for developing and manufacturing the instruments, SNP assay reagents and software and for marketing the system worldwide. In conjunction with the agreement, Applied Biosystems purchased 1.25 million shares of Series C convertible preferred stock at $4.00 per share. In addition, Applied Biosystems agreed to provide us with non-refundable research and development support of $10 million, all of which was provided by December 2001. Upon commercialization of the system, we were to receive a share of the operating profits from the sales of all components of these systems, had such sales occurred.

In July 2002, Applied Biosystems indicated that the planned mid-2002 launch of this genotyping system would be delayed a second time. This delay was related to Applied Biosystems' inability to optimize and multiplex the SNP assay reagents. We do not believe that Applied Biosystems has any intention of continuing to develop a collaboration product with us. As a result of the delay in developing the collaboration product, we launched our own production-scale genotyping system in July 2002 utilizing our arrays and an independently developed scanner and assay method. In December 2002, we announced that we had notified Applied Biosystems that it was in breach of the joint development agreement. This notification followed a patent infringement suit filed by Applied Biosystems against us and a notification from Applied Biosystems alleging that we had breached the joint development agreement and seeking to compel arbitration pursuant to the agreement. In December 2003, we notified Applied Biosystems that we had terminated the joint development agreement. For further information regarding this matter, please see ITEM 3, ''Legal Proceedings'' and ITEM 7, ''Managements' Discussion and Analysis of Financial Condition and Results of Operations.'' We do not have any other significant partnerships or collaborations.

Research and Development

We have made substantial investments in research and development since our inception. We have assembled a team of skilled engineers and scientists who are specialists in biology, chemistry, informatics, instrumentation, optical systems, software, manufacturing and other related areas required to complete the development of our products. Our research and development efforts have focused primarily on the tasks required to optimize our BeadArray and Oligator technologies and to support commercialization of the products and services derived from these technologies. These efforts include among others:

- We enhanced the quality and manufacturing yield of our Sentrix Array Matrices and BeadChips. We are exploring ways to continue to increase the level of automation in the manufacturing process to further reduce the time and cost of producing arrays. We currently have the infrastructure in place to manufacture Sentrix Array Matrices and BeadChips in sufficient quantity to meet anticipated internal and external needs.

- We introduced a number of initiatives in 2002 and 2003 to improve the yield and quality of our oligonucleotides while reducing cost substantially. By refining our understanding of the design and operation of our Oligator technology, we have been able to make numerous changes in our process, which we believe provides us a more cost effective system than competing technologies. Our oligonucleotide manufacturing facility currently has the capability of producing approximately 20 million oligonucleotides per year.

- We have developed the BeadArray Reader, a laser scanning instrument that scans our Sentrix array platforms. Laser scanners provide the high sensitivity and resolution required to address the extremely dense geometries of our bead-based arrays. We made the first commercial shipments of our scanners in the first quarter of 2003 as part of our BeadLab system.

- We completed development of and launched our gene expression product line on both array formats. We believe the combination of our gene expression products flexibility and low-per-sample cost will enable larger and more meaningful gene expression studies.

- We have been exploring the underlying molecular biology and chemistry issues related to developing assays and performing experiments on our BeadArray platforms. By improving our processes and protocols, we have substantially increased the number of assays we can process simultaneously in a single sample on our arrays.

Our research and development expenses for the fiscal years 2003, 2002 and 2001 (exclusive of charges relating to stock based compensation of $1.3 million, $2.4 million and $3.1 million, respectively) were $22.5 million, $26.8 million and $20.7 million, respectively. We expect research and development expense to remain flat in 2004 as compared to 2003 but in general increase in the future as we continue to expand our research and product development efforts.

Government Grants

Government grants allow us to fund internal scientific programs and exploratory research. We retain ownership of all intellectual property and commercial rights generated during these projects, subject to a non-exclusive, non-transferable, paid-up license to practice, for or on behalf of the United States, inventions made with federal funds. This license is retained by the U.S. government as provided by applicable statutes and regulations. We do not believe that the retained license will have any impact on our ability to market our products, and we do not need government approval with respect to this license in order to enter into collaborations or other relationships with third parties. We are the recipient of a grant from the National Institutes of Health covering our participation in the International HapMap Project, which is a $100 million, internationally funded successor project to the Human Genome Project that will help identify a map of genetic variations that may be used to perform disease-related research. We could receive up to $9 million of funding for this project which covers basic research activities, the development of SNP assays and the genotyping to be performed on those assays. As of the end of 2003, we had approximately $5.4 million of funding remaining related to this project, much of which is expected to be received in 2004, depending on the actual amount of work that is performed by us.

Intellectual Property

We have an extensive patent portfolio, including ownership of, or exclusive licenses to, 27 issued U.S. patents and 65 pending U.S. patent applications, including four allowed applications that have not yet issued as patents, some of which derive from a common parent application. Our issued patents, which cover various aspects of our BeadArray, oligonucleotide synthesis and chemical detection technologies, expire between 2011 and 2020. We are seeking to extend this patent protection on our BeadArray, GoldenGate, Oligator, Sentrix and related technologies. We have received or filed counterparts for many of these patents and applications in one or more foreign countries.

We also rely upon trade secrets, know-how, copyright and trademark protection, as well as continuing technological innovation and licensing opportunities to develop and maintain our competitive position. Our success will depend in part on our ability to obtain patent protection for our products and processes, to preserve our copyrights and trade secrets, to operate without infringing the proprietary rights of third parties and to acquire licenses related to enabling technology or products used with our BeadArray, GoldenGate, Sentrix and Oligator technologies.

We are party to various exclusive and non-exclusive license agreements with third parties, which grant us rights to use key aspects of our array technology, assay methods, chemical detection methods, reagent kits and scanning equipment. We have exclusive licenses from Tufts University to patents that cover our use of BeadArray technology. These patents were filed by Dr. David Walt, a member of our board of directors, the Chairman of our Scientific Advisory Board and one of our founders. Our exclusive licenses expire with the termination of the underlying patents, which will occur between 2010 and 2020. In 2001, we entered into a non-exclusive license agreement with Amersham Biosciences that covers certain technology contained in our BeadArray Reader. In 2002, we obtained a non-exclusive license from Dade Behring Marburg GmbH that relates to certain components of our GoldenGate assay. In all cases, the agreements remain in effect over the term of the underlying patents, may be terminated at our request without further obligation and require that we pay customary royalties while the agreement is in effect.

Marketing and Distribution

Our current products address the genetic analysis portion of the life sciences market, in particular, experiments involving SNP genotyping and gene expression profiling. These experiments may be involved in many areas of biologic research including basic human disease research, pharmaceutical drug discovery and development, pharmacogenomics, toxicogenomics and agricultural research. Our potential customers include pharmaceutical, biotechnology, agrichemical, diagnostics and consumer products companies, as well as academic or private research centers. The genetic analysis market is relatively new and emerging and its size and speed of development will be ultimately driven by, among other items,

- the ability of the research community to extract medically valuable information from genomics and to apply that knowledge to multiple areas of disease-related research and treatment,
- the availability of sufficiently low cost, high-throughput research tools to enable the large amount of experimentation required to study genetic variation and function, and
- the availability of government and private industry funding to perform the research required to extract medically relevant information from genomic analysis.

We market and distribute our products directly to customers in North America, major European markets, Japan and Singapore. In each of these areas we have dedicated sales, service and application support personnel responsible for expanding and managing their respective customer bases. In markets outside of these areas, primarily the Pacific Rim countries, we sell our products and provide services to customers through distributors that specialize in life science products. We expect to significantly increase our sales and distribution resources during 2004 and beyond as we launch a number of new products and expand the number of customers that can use our products.

Manufacturing

We manufacture our array platforms, reagent kits, scanning equipment and oligonucleotides in-house and believe that we currently have the ability to manufacture these in sufficient quantity to meet anticipated internal and external needs. We currently depend upon outside suppliers for materials used in the manufacture of our products. We intend to continue, and may extend, the outsourcing of portions of our manufacturing process to subcontractors where we determine it is in our best commercial interests.

During 2001, we moved into a new facility which allowed us to design the manufacturing areas to fit our specific processes, and optimize material flow and personnel movement. In addition, we have implemented information management systems for many of our manufacturing and services operations to manage all aspects of material and sample use. We adhere to access and safety standards required by federal, state and local health ordinances, such as standards for the use, handling and disposal of hazardous substances.

Competition

Although we expect that our BeadArray products and services will provide significant advantages over currently available products and services, we expect to encounter intense competition from other companies that offer products and services for the SNP genotyping and gene expression markets. These include companies such as Aclara Biosciences, Affymetrix, Agilent, Amersham Biosciences (recently acquired by GE Corp.), Applied Biosystems, Beckman Coulter, Caliper Technologies, Luminex, ParAllele Bioscience, Perlegen Sciences, Sequenom and Third Wave Technologies. Many of these companies have or will have substantially greater financial, technical, research, and other resources and larger, more established marketing, sales, distribution and service organizations than we do. In addition, they may have greater name recognition than we do in the markets we need to address and in some cases a large installed base of systems. Each of these markets is very competitive and we expect new competitors to emerge and the intensity of competition to increase in the future. In order to effectively compete with these companies, we will need to demonstrate that our products have superior throughput, cost and accuracy advantages over the existing products. Rapid technological development may result in our products or technologies becoming obsolete. Products offered by us could be made obsolete either by less expensive or more effective products based on similar or other technologies. Although we believe that our technology and products will offer advantages that will enable us to compete effectively with these companies, we cannot assure you that we will be successful.

Geographic Information

During 2003, $14.4 million, or 51%, of our total revenues came from customers outside the United States, as compared to $1.3 million, or 13%, in 2002. We expect that sales to international customers will continue to be an important and growing source of revenues. In 2003, we continued to add sales support resources in Western Europe and opened direct sales offices in Japan and Singapore. In addition, we established new distributor relationships in China and Australia.

Information about the geographies in which we operate can be found in the Notes to Consolidated Financial Statements at Note 10, ''Segment Information and Geographic Data.''

Employees

As of December 28, 2003, we had a total of 236 employees, 53 of whom hold Ph.D. degrees and 103 of whom are engaged in full-time research and development activities. None of our employees is represented by a labor union. We consider our employee relations to be positive.

Executive Officers

Our executive officers as of March 1, 2004, are as follows:

Name	Age	Position
Jay T. Flatley	51	President, Chief Executive Officer and Director
David L. Barker, Ph.D.	62	Vice President, Chief Scientific Officer
Paulette D. Cabral	59	Vice President of Human Resources
David C. Douglas	49	Vice President of Manufacturing
Noemi C. Espinosa	45	Vice President of Intellectual Property
Robert C. Kain	43	Vice President of Engineering
Timothy M. Kish	52	Vice President, Chief Financial Officer
Arnold Oliphant, Ph. D	44	Vice President of Scientific Operations
Tristan B. Orpin	38	Vice President of Worldwide Sales
John R. Stuelpnagel, DVM	46	Founder, Senior Vice President of Operations and Director

Jay T. Flatley has served as our President, Chief Executive Officer and a Director since October 1999. Prior to joining Illumina, Mr. Flatley was co-founder, President, Chief Executive Officer and a Director of Molecular Dynamics, a life sciences company, from May 1994 to September 1999. He served in various other positions with that company from 1987 to 1994. From 1985 to 1987, Mr. Flatley was Vice President of Engineering and Vice President of Strategic Planning at Plexus Computers, a UNIX computer company. Mr. Flatley holds a B.A. in Economics from Claremont McKenna College and a B.S. and M.S. in Industrial Engineering from Stanford University.

David L. Barker, Ph.D., has served as our Vice President and Chief Scientific Officer since March 2000. Prior to joining us, Dr. Barker was Vice President and Chief Science Advisor at Amersham Pharmacia Biotech, a life sciences company, from September 1998 to March 2000. From May 1997 to September 1998, Dr. Barker was Vice President of Research and Business Development of Molecular Dynamics. From 1992 to 1997, he was Vice President of Scientific Development. From 1988 to 1995, he held various other positions with that company. Dr. Barker holds a B.S. in Chemistry from California Institute of Technology and received his Ph.D. in Biochemistry from Brandeis University.

Paulette D. Cabral has served as our Vice President of Human Resources since March 2001. Prior to joining us, Ms. Cabral was the Vice President of Human Resources at Marimba, Inc., an internet infrastructure company, from July 2000 to February 2001. From December 1996 to July 2000, Ms. Cabral held various human resource positions at Molecular Dynamics; most recently, she was Vice President of Human Resources. Previous to that she held various positions at Acuson Corporation and Spectra Physics. Ms. Cabral holds a B.A. in Sociology from San Jose State University.

David C. Douglas has served as our Vice President of Manufacturing since January 2001. Prior to joining us, Mr. Douglas was Vice President of Operations at POSDATA Inc., an information technology equipment company, from July 1989 to December 2000. From July 1988 to July 1989, Mr. Douglas was Test Operations Manager at Acuson Computed Sonography, a medical equipment company. Previous to that he held various positions at Plexus Computers and Spectra Physics. Mr. Douglas holds a B.S. in Electronics Engineering Technology from Oregon Institute of Technology.

Noemi C. Espinosa has served as our Vice President of Intellectual Property since May 2000 and our Corporate Secretary since January 2001. Prior to joining us, Ms. Espinosa was a partner with the firm of Brobeck, Phleger & Harrison LLP from January 1992 to April 2000, having joined the firm in 1990. From 1983 to 1990, Ms. Espinosa was associated with the intellectual property firm of Townsend & Townsend. Ms. Espinosa holds a B.S. in Chemical Engineering from San Jose State University and a J.D. from the University of California, Hastings College of Law. She is registered to practice before the United States Patent and Trademark Office.

Robert C. Kain has served as our Vice President of Engineering since December 1999. Prior to joining us, Mr. Kain was Senior Director of Engineering at Molecular Devices from July 1999 to December 1999. Previously, Mr. Kain served as Director of Microarray Engineering at Molecular Dynamics from August 1998 to July 1999 and in other positions from August 1996 to August 1998. From 1983 to 1988, Mr. Kain was employed at DatagraphiX, an information technology equipment company. Mr. Kain received his B.S. in Physics from San Diego State University and his M.B.A. from St. Mary's College.

Timothy M. Kish has served as our Vice President and Chief Financial Officer since May 2000. Prior to joining us, Mr. Kish was Vice President, Finance and Chief Financial Officer at Biogen, Inc., a biopharmaceutical company, from September 1993 to April 2000. He served as Corporate Controller of that company from 1986 to 1993. From 1983 to 1986, Mr. Kish was Director of Finance at Allied Health & Scientific Products Company, a subsidiary of Allied-Signal Corporation. Mr. Kish holds a B.B.A. from Michigan State University and an M.B.A. from the University of Minnesota.

Arnold Oliphant, Ph.D., has served as our Vice President of Scientific Operations since October 2000. Prior to joining us, Dr. Oliphant was Vice President of Functional Genomics at Myriad Genetics, a genomics company, from 1997 to September 2000 and was Process Development and Production

Director from January 1995 to June 1997. From January 1992 to January 1995, Dr. Oliphant held several positions at Pioneer Hybrid International, a plant genetics company and prior to that was an Assistant Professor at the University of Utah. Dr. Oliphant received his B.A. in biology from the University of Utah and his Ph.D. in Genetics from the Harvard Medical School.

Tristan Orpin has served as our Vice President of Worldwide Sales since December 2002. Prior to joining us, Mr. Orpin was the Vice President of Sales and Marketing at Sequenom, a genomics company, from August 2001 to November 2002 and was Director of Sales and Marketing from September 1999 to August 2001. From December 1988 to September 1999, Mr. Orpin served in several senior sales and marketing positions at Bio-Rad Laboratories, a life sciences company. Mr. Orpin received his BSc. in Biochemistry from the University of Melbourne.

John R. Stuelpnagel, D.V.M., one of our founders, is our Senior Vice President of Operations and has been a director since April 1998. From October 1999 to April 2002, he served as our Vice President of Business Development. From April 1998 to October 1999, he served as our acting President and Chief Executive Officer and was acting Chief Financial Officer through April 2000. While founding Illumina, Dr. Stuelpnagel was an associate with CW Group, a venture capital firm, from June 1997 to September 1998 and with Catalyst Partners, a venture capital firm, from August 1996 to June 1997. Dr. Stuelpnagel received his B.S. in Biochemistry and his Doctorate in Veterinary Medicine from the University of California, Davis and his M.B.A. from the University of California, Los Angeles.

Item 2. ***Properties.***

Our principal research and development, manufacturing and administrative facilities occupy approximately 90,000 square feet of three buildings located in San Diego, California, which we purchased, along with eight acres of adjacent land, in January 2002. In connection with this purchase we assumed a $26 million, 10-year mortgage on the property at a fixed interest rate of 8.36%. We lease a total of 26,000 square feet of this space to two tenants. The land has been approved for construction of a fourth building although, we have no current plans to construct the fourth building. We expect that these facilities will be sufficient for our San Diego based operations for the foreseeable future.

In February 2003, the Company began leasing approximately 3,300 square feet of office space in Tokyo and in January 2004, began leasing approximately 1,600 square feet of office space in Singapore. These facilities are used by local sales, marketing and field service personnel. At December 28, 2003, annual future minimum payments for these facilities were approximately $462,000.

Item 3. ***Legal Proceedings.***

In March 2001, a complaint seeking damages of an unspecified amount was filed against us by a former employee in the Superior Court of the State of California in connection with the employee's termination of employment with Illumina. In July 2002 a California Superior Court judgment was rendered against the Company and we recorded a $7.7 million charge in our financial results for the second quarter of 2002 to cover total damages and remaining expenses. We believe that the termination was lawful in all respects and that the verdict was unsupported by evidence presented at the trial. A notice of appeal in this case was filed on October 10, 2002, and the appeal process is ongoing. We are also recording interest expense on the $7.7 million during the appeal based on the statutory rate.

In December 2002, Applied Biosystems Group filed a complaint, then later in March 2003 amended and refiled a complaint, for a patent infringement suit against us in the federal court in Northern California asserting infringement of several patents related to an Applied Biosystems' assay intended for use in our collaboration. Applied Biosystems seeks a judgment granting it damages for infringement, treble damages alleging that such infringement is willful and a permanent injunction restraining us from the alleged infringement. We have answered the complaint, asserting various defenses, including that we do not infringe the patents or that the patents are invalid, and asserting

counterclaims against Applied Biosystems seeking declaratory judgment relief related to the patents being asserted against us, and seeking damages from Applied Biosystems for its unfair and unlawful conduct which constitutes attempted monopolization in violation of the antitrust laws.

Also in December 2002, Applied Biosystems sent a notification to us alleging that we had breached the joint development agreement between Illumina and Applied Biosystems entered into in November 1999 and seeking to compel arbitration pursuant to that agreement. This notification alleged that our production-scale genotyping products and services are collaboration products developed under the joint development agreement, and that our commercial activities with respect to our genotyping products and services are unlawful, unfair or fraudulent. Among other relief, Applied Biosystems is seeking compensatory damages of $30 million, disgorgement of all revenues received from sales of these products and services and a prohibition of future sales of these products or services.

In December 2002, we filed a suit alleging breach of contract, breach of the implied covenant of good faith and fair dealing, unfair competition and other allegations against Applied Biosystems in San Diego Superior Court, and a motion for a temporary restraining order to prevent the arbitration of our joint development agreement sought by Applied Biosystems. In December 2003, we notified Applied Biosystems that we terminated the joint development agreement.

In December 2003, after having granted temporary and preliminary injunctions staying the arbitration, the San Diego Superior Court directed Applied Biosystems and us to resolve the contract dispute in a binding arbitration procedure. While a definitive schedule has not yet been set, we believe that the arbitration process could be completed as early as September 2004. We will vigorously defend against the claims alleged by Applied Biosystems but the outcome of an arbitration proceeding is inherently uncertain and we cannot be sure that we will prevail. This arbitration could result in a range of potential outcomes, based solely on the judgment and discretion of the arbitrator, including (1) the award of all damages and injunctive relief sought by Applied Biosystems; (2) the award of all damages and relief sought by us; or (3) a partial award of damages and/or injunctive relief to either party. We have not accrued for any potential losses in this case because we believe that an adverse determination is not probable, and potential losses cannot be reasonably estimated. In addition, our financial statements include a $10 million advance payment from Applied Biosystems that would have been deducted from the profits otherwise payable to us from Applied Biosystems had the collaboration been successful and which could offset the impact on our consolidated results of operations of an adverse arbitration determination up to that amount. However, any unfavorable arbitration determination, and in particular any significant cash amounts required to be paid by the Company or prohibition of the sale of our products or services, could result in a material adverse effect on our business, financial condition and results of operations.

We are in the early stages of proceedings in the patent case. In February 2004, the federal district court in Northern California ordered that the patent case be stayed pending completion of the arbitration process. We intend to vigorously defend against the claims alleged by Applied Biosystems and continue to pursue our counterclaims against Applied Biosystems. However, we cannot be sure that we will prevail in these matters. Any unfavorable determination, and in particular any significant cash amounts required to be paid by the Company or prohibition of the sale of our products or services, could result in a material adverse effect on our business, financial condition and results of operations.

Item 4. ***Submission of Matters to a Vote of Security Holders.***

No matters were submitted to a vote of security holders during the fourth quarter of 2003.

PART II

Item 5. ***Market for Registrant's Common Stock and Related Stockholder Matters.***

Our common stock has been quoted on the Nasdaq National Market under the symbol ''ILMN'' since July 28, 2000. Prior to that time, there was no public market for our common stock. The following table sets forth, for the periods indicated, the quarterly high and low closing prices per share of the common stock as reported on the Nasdaq National Market. Our present policy is to retain earnings, if any, to finance future growth. We have never paid cash dividends and have no present intention to pay cash dividends in the foreseeable future.

	2002	
	High	Low
First Quarter	$12.34	$6.50
Second Quarter	9.00	4.34
Third Quarter	6.22	2.93
Fourth Quarter	5.83	2.91
	2003	
	High	Low
First Quarter	$3.95	$1.80
Second Quarter	4.19	1.81
Third Quarter	5.31	2.81
Fourth Quarter	8.50	5.20

At March 1, 2004, there were approximately 145 stockholders of record and the price per share of our common stock, as reported on the Nasdaq National Market on such date, was $6.89.

Sales of Unregistered Securities

None.

Use of Proceeds

On July 27, 2000, we commenced our initial public offering pursuant to a Registration Statement on Form S-1 (File No. 333-33922) resulting in net offering proceeds of $101.3 million. We will continue to use proceeds from our initial public offering to fund operations. Through December 28, 2003, we have used approximately $18 million to purchase property, plant and equipment and approximately $38 million to fund general operating expenses. The remaining balance is invested in a variety of interest-bearing instruments including U.S. Treasury securities, corporate debt securities and money market accounts.

Item 6. ***Selected Financial Data.***

The following selected historical consolidated financial data have been derived from our audited consolidated financial statements. The balance sheet data as of December 28, 2003 and December 29, 2002 and statements of operations data for each of the three years in the period ended December 28, 2003 are derived from audited consolidated financial statements included in this Form 10-K. You

should read this table in conjunction with Item 7, ''Management's Discussion and Analysis of Financial Condition and Results of Operations,'' and Item 8, ''Financial Statements and Supplementary Data.''

Statements of Operations Data

	Year Ended December 28, 2003	Year Ended December 29, 2002	Year Ended December 30, 2001	Year Ended December 31, 2000	Year Ended December 31, 1999
	(In thousands, except per share data)				
Revenue:					
Product revenue	$ 18,378	$ 4,103	$ 897	$ 42	$ 37
Service revenue	6,496	3,305	99	—	—
Research revenue	3,161	2,632	1,490	1,267	437
Total revenue	28,035	10,040	2,486	1,309	474
Costs and expenses:					
Cost of product and service revenue	10,037	3,536	557	—	—
Research and development	22,511	26,848	20,735	13,554	4,085
Selling, general and administrative	18,899	9,099	5,663	4,193	1,349
Amortization of deferred compensation and other non-cash compensation charges	2,454	4,360	5,850	6,797	958
Litigation judgment	756	8,052	—	—	—
Total costs and expenses	54,657	51,895	32,805	24,544	6,392
Loss from operations	(26,622)	(41,855)	(30,319)	(23,235)	(5,918)
Interest income, net	(441)	1,524	5,496	4,629	400
Net loss	$(27,063)	$(40,331)	$(24,823)	$(18,606)	$(5,518)
Net loss per share, basic and diluted	$ (0.85)	$ (1.31)	$ (0.83)	$ (1.37)	$ (3.91)
Shares used in calculating net loss per share, basic and diluted	31,925	30,890	29,748	13,557	1,410

Balance Sheet Data

	December 28, 2003	December 29, 2002	December 30, 2001	December 31, 2000	December 31, 1999
			(In thousands)		
Cash, cash equivalents and current restricted cash and investments	$ 32,882	$ 66,294	$ 93,786	$118,719	$33,088
Working capital	32,229	58,522	91,452	126,260	32,881
Total assets	99,234	121,906	122,465	132,793	33,895
Long-term debt obligations	24,999	25,620	590	887	—
Accumulated deficit	(117,487)	(90,424)	(50,093)	(25,270)	(6,663)
Total stockholders' equity	47,388	71,744	106,791	124,100	32,032

See Note 1 of Notes to Financial Statements for an explanation of the determination of the number of shares used to compute basic and diluted net loss per share.

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operation.*

The following discussion and analysis should be read with ''Selected Financial Data'' and our financial statements and notes thereto included elsewhere in this Annual Report on Form 10-K. The discussion and analysis in this Annual Report on Form 10-K may contain forward-looking statements that involve risks and uncertainties, such as statements of our plans, objectives, expectations and intentions. The cautionary statements made in this Annual Report on Form 10-K should be read as applying to all related forward-looking statements wherever they appear in this Annual Report on Form 10-K. Our actual results could differ materially from those discussed here. Factors that could cause or contribute to these differences include those discussed in ''Factors Affecting Operating Results'' below as well as those discussed elsewhere.

Overview

Illumina, Inc. was incorporated in April 1998. We are developing next-generation tools for the large-scale analysis of genetic variation and function. Understanding genetic variation and function is critical to the development of personalized medicine, a key goal of genomics. Using our technologies, we have developed a comprehensive line of products that are designed to provide the throughput, cost effectiveness and flexibility necessary to enable researchers in the life sciences and pharmaceutical industries to perform the billions of tests necessary to extract medically valuable information from advances in genomics. This information is expected to correlate genetic variation and gene function with particular disease states, enhancing drug discovery, allowing diseases to be detected earlier and more specifically, and permitting better choices of drugs for individual patients.

In November 1999, we entered into a joint development agreement with Applied Biosystems under which the companies would jointly develop a SNP genotyping system that would combine our BeadArray technology with Applied Biosystems' assay chemistry and scanner technology. Under this agreement, we were primarily responsible for developing and manufacturing the arrays and Applied Biosystems was primarily responsible for developing and manufacturing the instruments, SNP assay reagents, and software and for marketing the system worldwide. In conjunction with the agreement, Applied Biosystems purchased 1.25 million shares of Series C convertible preferred stock at $4.00 per share. In addition, Applied Biosystems agreed to provide us with non-refundable research and development support of $10 million, all of which was provided by December 2001. Upon commercialization of the system, we would have received a share of the operating profits from the sales of all components of these systems. We had originally deferred recognition of revenue from the research funding of $10 million provided by Applied Biosystems, and would have recognized such amounts as revenue at a contractually defined rate of 25% of the total profit share we earned from the sales of

collaboration products, had such sales occurred. As of December 28, 2003, this amount has been reclassified to an advance payment from former collaborator.

In July 2002, Applied Biosystems indicated that the planned mid-2002 launch of this genotyping system would be delayed a second time. This delay was related to Applied Biosystems' inability to optimize and multiplex the SNP assay reagents. We do not believe that Applied Biosystems has any intention of continuing to develop a collaboration product with us, and it has recently launched a competing product. As a result of the delay in developing the collaboration product, we launched our own production-scale genotyping system in July 2002 utilizing our arrays and an independently developed scanner and assay method.

In December 2002, Applied Biosystems filed a complaint, then later in March 2003 amended and refiled a complaint, for a patent infringement suit against us in the federal court in Northern California asserting infringement of several patents related to Applied Biosystems' patented assay intended for use in our collaboration. Applied Biosystems seeks a judgment granting it damages for infringement, treble damages alleging that such infringement is willful and a permanent injunction restraining us from the alleged infringement. We have answered the complaint, asserting various defenses, including that we do not infringe the patents or that the patents are invalid, and asserting counterclaims against Applied Biosystems seeking declaratory judgment relief related to the patents being asserted against us, and seeking damages from Applied Biosystems for its unfair and unlawful conduct which constitutes attempted monopolization in violation of the antitrust laws.

Also in December 2002, Applied Biosystems sent a notification to us alleging that we had breached the joint development agreement entered into in November 1999 and seeking to compel arbitration pursuant to that agreement. This notification alleged that our production-scale genotyping products and services are collaboration products developed under the joint development agreement, and that our commercial activities with respect to our genotyping products and services are unlawful, unfair or fraudulent. Among other relief, Applied Biosystems is seeking compensatory damages of $30 million, disgorgement of all revenues received from sales of these products and services and a prohibition of future sales of these products or services.

In December 2002, we filed a suit alleging breach of contract, breach of the implied covenant of good faith and fair dealing, unfair competition and other allegations against Applied Biosystems in San Diego Superior Court, and a motion for a temporary restraining order to prevent the arbitration of our joint development agreement sought by Applied Biosystems. In December 2003, we notified Applied Biosystems that we terminated the joint development agreement.

In December 2003, after having granted temporary and preliminary injunctions staying the arbitration, the San Diego Superior Court directed Applied Biosystems and us to resolve the contract dispute in a binding arbitration procedure. While a definitive schedule has not yet been set, we believe that the arbitration process could be completed as early as September 2004. We will vigorously defend against the claims alleged by Applied Biosystems but the outcome of an arbitration proceeding is inherently uncertain and we cannot be sure that we will prevail. This arbitration could result in a range of potential outcomes, based solely on the judgment and discretion of the arbitrator, including (1) the award of all damages and injunctive relief sought by Applied Biosystems; (2) the award of all damages and relief sought by us; or (3) a partial award of damages and/or injunctive relief to either party. We have not accrued for any potential losses in this case because we believe that an adverse determination is not probable, and potential losses cannot be reasonably estimated. In addition, our financial statements include a $10 million advance payment from Applied Biosystems that would have been deducted from the profits otherwise payable to us from Applied Biosystems had the collaboration been successful and which could offset the impact on our consolidated results of operations of an adverse arbitration determination up to that amount. However, any unfavorable arbitration determination, and in particular any significant cash amounts required to be paid by us or prohibition of the sale of our products or services, could result in a material adverse effect on our business, financial condition and results of operations.

We are in the early stages of proceedings in the patent case. In February 2004, the federal district court in Northern California ordered that the patent case be stayed pending completion of the arbitration process. We intend to vigorously defend against the claims alleged by Applied Biosystems and continue to pursue our counterclaims against Applied Biosystems. However, we cannot be sure that we will prevail in these matters. Any unfavorable determination, and in particular any significant cash amounts required to be paid by us or prohibition of the sale of our products or services, could result in a material adverse effect on our business, financial condition and results of operations.

In the first quarter of 2001, we began commercial sale of short pieces of DNA, or oligos, manufactured using our proprietary Oligator technology. We believe our Oligator technology is more cost effective than competing technologies, which has allowed us to market our oligonucleotides under a price leadership strategy while still achieving attractive gross margins. In the second quarter of 2001, we initiated our SNP genotyping services product line. As a result of the increasing market acceptance of our high throughput, low cost BeadArray technology, we have entered into genotyping services contracts with many of the leading genotyping organizations including GlaxoSmithKline and The Sanger Centre, and have been awarded $9 million from the National Institutes of Health to play a major role in the International HapMap Project.

Our production-scale genotyping system, BeadLab, is based on the system we developed that has been operational in our genotyping service product line since 2001. In addition to our Sentrix Array Matrices, it includes the BeadArray Reader, a proprietary scanner that uses a laser to read the results of experiments captured on our arrays, as well as the GoldenGate SNP genotyping assay which can analyze up to 1536 SNPs per DNA sample. This system is initially being marketed to a small number of high throughput genotyping users.

In the first quarter of 2003, we completed the installation of and recorded revenue for our first BeadLab high-throughput SNP genotyping system. We installed and recorded revenue for a second BeadLab in the second quarter of 2003, two additional BeadLabs in the third quarter of 2003 and a fifth and sixth BeadLab system in the fourth quarter of 2003.

In the second quarter of 2003, we announced the launch of a new array format, the Sentrix BeadChip, which is expected to significantly expand market opportunities for our BeadArray technology and provide increased experimental flexibility for life science researchers.

In the third quarter of 2003, we announced the launch of a gene expression product line on both the Sentrix Array Matrix and the Sentrix BeadChip that will allow researchers to analyze a focused set of genes across eight to 96 samples on a single array.

In the fourth quarter of 2003, we announced the launch of a benchtop SNP genotyping system, the BeadStation, for performing medium scale genotyping using our technology. The BeadStation includes our BeadArray Reader, genotyping analysis software and GoldenGate assay reagents and is designed to match the throughput requirements and variable automation needs of individual research groups and core labs. This system is expected to be available for shipment in the second quarter of 2004.

In the first quarter of 2004, we announced the launch of two new Sentrix BeadChips for whole-genome gene expression. These BeadChips are designed to enable high-performance, cost-effective, whole-genome expression profiling of multiple samples on a single chip, resulting in a dramatic reduction in cost of whole-genome expression analysis while allowing researchers to expand the scale and reproducibility of large-scale biological experimentation.

We are seeking to expand our customer base for our BeadArray technology; however, we can give no assurance that our sales efforts will continue to be successful.

A significant portion of our current revenue is derived from a few, large individual transactions such as the sale of production genotyping systems and large genotyping services contracts, including our work on the International HapMap Project. Because these transactions do not occur regularly and

there is a lengthy sales cycle for such transactions, revenue of these types may not occur on a consistent or frequent basis. In addition, our total amount of revenues is subject to fluctuations in demand from seasonality impacts, the timing and amount of U.S. government grant funding programs, the timing and size of research projects our customers perform and changes in overall spending levels in the life science industry. Given the difficulty in predicting the timing and magnitude of sales for our products, we may experience quarter-to-quarter fluctuations in revenue, resulting in the potential for a sequential decline in quarterly revenue. Due to the possibility of fluctuations in our revenue and net income or loss, we believe quarterly comparisons of our operating results are not a good indication of our future performance.

We have incurred substantial operating losses since our inception. As of December 28, 2003, our accumulated deficit was $117.5 million, and total stockholders' equity was $47.4 million. These losses have principally occurred as a result of the substantial resources required for the research, development and manufacturing scale up effort required to commercialize our products and services, as well as charges of $8.8 million related to a termination-of-employment lawsuit. We expect to continue to incur substantial costs for research, development and manufacturing scale up activities over the next several years. We will also need to significantly increase our selling, general and administrative costs as we build up our sales and marketing infrastructure to expand and support the sale of systems, other products and services. As a result, we will need to increase revenue significantly to achieve profitability

Results of Operations

To enhance comparability, the following table sets forth audited Consolidated Statements of Operations for the years ended December 28, 2003, December 29, 2002 and December 30, 2001 stated as a percentage of total revenue.

	Year Ended December 28, 2003	Year Ended December 29, 2002	Year Ended December 30, 2001
Revenue			
Product revenue	66%	41%	36%
Service revenue	23	33	4
Research revenue	11	26	60
Total revenue	100	100	100
Costs and expenses:			
Cost of product and service revenue	36	35	23
Research and development	80	267	834
Selling, general and administrative	67	91	228
Amortization of deferred compensation and other non-cash compensation charges	9	44	235
Litigation judgment	3	80	—
Total costs and expenses	195	517	1,320
Loss from operations	(95)	(417)	(1,220)
Interest income	6	38	249
Interest expense	(8)	(23)	(28)
Net loss	(97)%	(402)%	(999)%

Comparison of Years Ended December 28, 2003 and December 29, 2002

Revenue

	Year Ended December 28, 2003	Year Ended December 29, 2002	Change
	(In thousands)		
Product revenue	$18,378	$ 4,103	348%
Service revenue	6,496	3,305	97
Research revenue	3,161	2,632	20
Total revenue	$28,035	$10,040	179%

Revenue for the years ended December 28, 2003 and December 29, 2002 was $28.0 million and $10.0 million, respectively. Product revenue increased to $18.4 million in 2003 from $4.1 million in 2002. The increase resulted almost entirely from the first sales of our BeadLab SNP genotyping system, with six systems sold in the year ended December 28, 2003, along with sales of consumables that are used on these systems. Prior to 2003 we had no sales of genotyping systems or consumable products. SNP genotyping service revenue increased to $6.5 million in 2003 from $3.3 million in 2002. Substantially all of this increase relates to genotyping services performed for the International HapMap Project, which commenced in 2003. We are the recipient of a grant from the National Institutes of Health covering our participation in the International HapMap Project, which is a $100 million, internationally funded successor project to the Human Genome Project that will help identify a map of genetic variations that may be used to perform disease-related research. We could receive up to $9.1 million of funding for this project which covers basic research activities, the development of SNP assays and the genotyping to be performed on those assays. We recognized revenue under this grant of $3.7 million in 2003 and, as of the end of 2003, we had approximately $5.4 million of funding remaining related to this project which is expected to be received in 2004, depending on the actual amount of work that we perform. Government grants and other research funding increased to $3.2 million for the year ended December 28, 2003 from $2.6 million for the year ended December 29, 2002 due to an increase in the number of grants received.

To expand revenue in the future, we have recently launched a series of new products that we expect to begin selling in 2004. These include our BeadStation system for moderate throughput genotyping needs, and two multi-sample whole genome gene expression BeadChips that are also processed on a BeadStation. Our BeadLab systems address a limited number of potential high throughput genotyping customers, and sales of these systems may decline in 2004 versus 2003. We expect the sales of the new products mentioned above to offset such decline and for overall revenues to increase above 2003 levels; however, we cannot be assured that we will be successful in these sales efforts.

Cost of Product and Service Revenue

	Year Ended December 28, 2003	Year Ended December 29, 2002	Change
	(In thousands)		
Cost of product and service revenue	$10,037	$3,536	184%

Cost of revenue represents manufacturing costs incurred in the production process, including component materials, assembly labor and overhead, packaging and delivery cost. Costs related to research revenue is included in research and development expense. Cost of product and service revenue increased to $10.0 million the year ended December 28, 2003 from $3.5 million for the year ended December 29, 2002. Substantially all of this increase was driven by the sales of our BeadLab systems and consumables, of which we had none in 2002, as well as the higher level of services revenue during 2003. Gross margins on product and service revenues were 60% in the year ended December 28, 2003, compared to 52% for the year ended December 29, 2002. This increase is due

primarily to increased sales of higher margin products and services such as SNP genotyping services, array matrices and assay reagents. We expect product mix will continue to affect our future gross margins. We also expect our total cost of product and service revenue to increase in the next year as we sell additional products, but to decrease as a percent of product and service revenue due to gains in manufacturing efficiencies and the sale of a larger proportion of higher margin products.

Research and Development Expenses

	Year Ended December 28, 2003	Year Ended December 29, 2002	Change
	(In thousands)		
Research and development	$22,511	$26,848	(16)%

Our research and development expenses consist primarily of salaries and other personnel-related expenses, laboratory supplies and other expenses related to the design, development, testing and enhancement of our products. We expense our research and development expenses as they are incurred. Research and development expenses decreased $4.3 million to $22.5 million for the year ended December 28, 2003 from $26.8 million for the year ended December 29, 2002.

During the year ended December 28, 2003, the cost of BeadArray research activities decreased $3.8 million as compared to the year ended December 29, 2002. The decrease occurred primarily as a result of completing the development of new products launched in 2003: the BeadChip, an additional microarray platform, a gene expression application on both our Array Matrix and BeadChip platforms and a benchtop SNP genotyping system, the BeadStation, for performing moderate scale genotyping. In addition, as we completed development efforts and increased our BeadArray-driven product sales, a smaller portion of our manufacturing resources was charged to research and development expense in 2003 than in 2002.

Research to support our Oligator technology platform decreased $0.5 million in the year ended December 28, 2003 as compared to the year ended December 29, 2002. This decline is primarily due to higher development expenses incurred in the first quarter of 2002 for a major upgrade of our Oligator technology, which resulted in a significant increase in our manufacturing capacity. In the second quarter of 2003, we implemented additional Oligator manufacturing enhancements to expand capacity, increase throughput, and further reduce operating costs. We expect that our research and development expenses will remain relatively flat over the next 12 months.

Stock based compensation related to research and development employees and consultants was $1.3 million for the year ended December 28, 2003 as compared to $2.4 million for the year ended December 29, 2002.

Selling, General and Administrative Expenses

	Year Ended December 28, 2003	Year Ended December 29, 2002	Change
	(In thousands)		
Selling, general and administrative	$18,899	$9,099	108%

Our selling, general and administrative expenses consist primarily of personnel costs for sales and marketing, finance, human resources, business development and general management, as well as professional fees, such as expenses for legal and accounting services. Selling, general and administrative expenses increased $9.8 million to $18.9 million for the year ended December 28, 2003 from $9.1 million for the year ended December 29, 2002. Approximately $4.4 million of this increase is related to higher legal expenses, which is primarily due to legal proceedings regarding the disputes with Applied Biosystems. Approximately $4.1 million of the increase is due to higher sales and marketing costs, of which $3.0 million is attributable to personnel related expenses while the majority of the remaining $1.1 million is attributable to an increase in facility related expenses. During 2003, we

significantly expanded our sales and marketing resources to support the direct sale of our new products, including establishing additional sales operations in Japan and Singapore. We expect that our selling, general and administrative expenses will accelerate as we expand our staff, add sales and marketing infrastructure and incur additional costs to support the commercialization and support of an increasing number of products.

Stock based compensation related to selling, general and administrative employees, directors and consultants was $1.2 million for the year ended December 28, 2003 as compared to $2.0 million for the year ended December 29, 2002.

Amortization of Deferred Compensation and Other Stock-Based Compensation Charges

	Year Ended December 28, 2003	Year Ended December 29, 2002	Change
	(In thousands)		
Amortization of deferred compensation and other stock-based compensation charges	$2,454	$4,360	(44)%

From our inception through July 27, 2000, in connection with the grant of certain stock options and sales of restricted stock to employees, founders and directors, we have recorded deferred stock compensation totaling $17.7 million, representing the difference between the exercise or purchase price and the fair value of our common stock as estimated for financial reporting purposes on the date such stock options were granted or such restricted stock was sold. We recorded this amount as a component of stockholders' equity and amortize the amount as a charge to operations over the vesting period of the restricted stock and options.

We recognize compensation expense over the vesting period for employees, founders and directors, using an accelerated amortization methodology in accordance with Financial Accounting Standards Board Interpretation No. 28. For consultants, deferred compensation is recorded at the fair value for the options granted or stock sold in accordance with Statement of Financial Accounting Standards No. 123 and is periodically re-measured and expensed in accordance with Emerging Issues Task Force No. 96-18.

We recorded amortization of deferred compensation of $2.5 million and $4.4 million for the years ended December 28, 2003 and December 29, 2002, respectively. We expect amortization of deferred compensation to decrease in 2004 due to the nature of the accelerated depreciation methodology as the options near the end of their vesting period.

Litigation Judgment

	Year Ended December 28, 2003	Year Ended December 29, 2002	Change
	(In thousands)		
Litigation judgment	$756	$8,052	(91)%

A $7.7 million charge was recorded in June 2002 to cover total damages and estimated expenses related to a termination-of-employment lawsuit. We believe that the termination was lawful in all respects and that the verdict was unsupported by evidence presented at the trial. We plan to vigorously defend our position on appeal. A notice of appeal in this case was filed on October 10, 2002, and the appeal process is ongoing. During the appeal process, the court requires us to incur interest charges on the judgment amount at statutory rates until the case is resolved. For the years ended December 28, 2003 and December 29, 2002, we recorded litigation expense of $756,000 and $352,000, respectively, for interest.

Interest Income

	Year Ended December 28, 2003	Year Ended December 29, 2002	Change
	(In thousands)		
Interest income	$1,821	$3,805	(52)%

Interest income on our cash and cash equivalents and investments was $1.8 million and $3.8 million for the years ended December 28, 2003 and December 29, 2002, respectively. The decrease is due to lower average levels of invested funds and lower effective interest rates.

Interest Expense

	Year Ended December 28, 2003	Year Ended December 29, 2002	Change
	(In thousands)		
Interest expense	$2,262	$2,281	(1)%

Interest expense was $2.3 million for the years ended December 28, 2003 and December 29, 2002. Interest expense relates primarily to a $26.0 million fixed rate loan related to the purchase of our new facility during the first quarter of 2002.

Provision for Income Taxes

We incurred net operating losses for the years ended December 28, 2003 and December 29, 2002, and accordingly, we did not pay any federal or state income taxes. We have recorded a valuation allowance for the full amount of the resulting net deferred tax asset, as the future realization of the tax benefit is uncertain. As of December 28, 2003, we had net operating loss carryforwards for federal and state tax purposes of approximately $69.5 million and $27.0 million, respectively, which begin to expire in 2018 and 2006.

We also had federal and state research and development tax credit carryforwards of approximately $3.1 million and $2.6 million, respectively, which begin to expire in 2018, unless previously utilized.

Our utilization of the net operating losses and credits may be subject to substantial annual limitations pursuant to Section 382 and 383 of the Internal Revenue Code, and similar state provisions, as a result of changes in our ownership structure. These annual limitations may result in the expiration of net operating losses and credits prior to utilization.

Comparison of Years Ended December 29, 2002 and December 30, 2001

Revenue

	Year Ended December 29, 2002	Year Ended December 30, 2001	Change
	(In thousands)		
Product revenue	$ 4,103	$ 897	357%
Service revenue	3,305	99	3,238%
Research revenue	2,632	1,490	77%
Total revenue	$10,040	$2,486	304%

Revenue for the years ended December 29, 2002 and December 30, 2001 was $10.0 million and $2.5 million, respectively. Product revenue increased to $4.1 million in 2002 from $0.9 million in 2001, mostly due to higher sales of oligonucleotides. SNP genotyping service revenue was $3.3 million in 2002 compared to $0.1 million in 2001 as a result of several contracts that were signed during 2002; 2001 was the first year of operations for our services and we experienced limited revenues. Government grants and other research funding increased to $2.6 million for the year ended Decem-

ber 29, 2002 from $1.5 million for the year ended December 30, 2001 due to a larger number of grants that were awarded to us.

Cost of Product and Service Revenue

	Year Ended December 29, 2002	Year Ended December 30, 2001	Change
	(In thousands)		
Cost of product and service revenue	$3,536	$557	535%

Cost of product and service revenue for the years ended December 29, 2002 and December 30, 2001 was $3.5 million and $0.6 million, respectively. The increase was driven by the increased sales of products and services. Gross margins on product and service revenues were 52% in 2002, versus 44% in 2001, driven by a more favorable cost structure in oligo manufacturing.

Research and Development

	Year Ended December 29, 2002	Year Ended December 30, 2001	Change
	(In thousands)		
Research and development	$26,848	$20,735	29%

Research and development expenses increased $6.1 million to $26.8 million for the year ended December 29, 2002, from $20.7 million for the year ended December 30, 2001. The increase in expenses was driven primarily by higher headcount, related personnel costs and higher laboratory and manufacturing supplies required to continue development of our BeadArray technology, which is the underlying technology on which Illumina was founded. During the year ended December 29, 2002, the research expense to support our BeadArray activities increased $5.4 million over the same period in 2001. These additional research and development expenses were related to activities such as exploring and optimizing assays for various types of genetic analysis experiments, increasing the multiplexing level of our arrays, continuing development of our arrays and the scanning instrumentation required to read arrays and building up and optimizing our SNP genotyping services system. Research to support our Oligator technology platform increased $0.7 million during the year ended December 29, 2002, as compared to the year ended December 30, 2001. During 2002, we introduced upgrades to our Oligator technology that significantly increased capacity and quality while reducing manufacturing cost.

Stock based compensation related to research and development employees and consultants was $2.4 million for the year ended December 29, 2002 as compared to $3.1 million for the year ended December 30, 2001.

Selling, General and Administrative Expenses

	Year Ended December 29, 2002	Year Ended December 30, 2001	Change
	(In thousands)		
Selling, general and administrative	$9,099	$5,663	61%

Selling, general and administrative expenses increased $3.4 million to $9.1 million for the year ended December 29, 2002, from $5.7 million for the year ended December 30, 2001. A portion of this increase is due to higher legal expenses related to a termination-of-employment lawsuit as well as higher legal expenses related to securing patents. The remaining increase was due to increases in the sales and marketing costs required to expand and support our custom oligonucleotide sales and SNP genotyping services operations.

Stock based compensation related to selling, general and administrative employees, directors and consultants was $2.0 million for the year ended December 29, 2002 as compared to $2.7 million for the year ended December 30, 2001.

Amortization of Deferred Compensation and Other Stock-Based Compensation Charges

	Year Ended December 29, 2002	Year Ended December 30, 2001	Change
	(In thousands)		
Amortization of deferred compensation and other stock-based compensation charges	$4,360	$5,850	(25)%

In connection with the grant of stock options and sale of restricted common stock to employees, founders and directors through July 27, 2000, we recorded deferred compensation of approximately $17.7 million. We recorded amortization of this deferred compensation of $4.4 million and $5.9 million for the years ended December 29, 2002 and December 30, 2001, respectively.

Interest Income

	Year Ended December 29, 2002	Year Ended December 30, 2001	Change
	(In thousands)		
Interest income	$3,805	$6,198	(39)%

Interest income on our cash and cash equivalents and investments was $3.8 million and $6.2 million for the years ended December 29, 2002 and December 30, 2001, respectively. Interest income decreased in 2002 due to lower average levels of invested funds and lower effective interest rates.

Interest Expense

	Year Ended December 29, 2002	Year Ended December 30, 2001	Change
	(In thousands)		
Interest expense	$2,281	$702	225%

Interest expense was $2.3 million for the year ended December 29, 2002 as compared to $0.7 million for the year ended December 30, 2001. Interest expense for the year ended December 29, 2002 resulted primarily from a $26.0 million loan related to the purchase of our new facility during the first quarter of 2002.

Liquidity and Capital Resources

As of December 28, 2003, we had cash, cash equivalents and investments (including restricted cash and investments of $100,000) of approximately $32.9 million. In addition, we had long term restricted investments of $12.2 million. We currently invest our funds in U.S. dollar based investment-grade corporate and government debt securities with average maturities of approximately 22 months.

Our operating activities used cash of $18.3 million in the year ended December 28, 2003, as compared to $25.6 million in the year ended December 29, 2002. Net cash used in operating activities in 2003 was primarily the result of a net loss from operations of $27.1 million reduced by non-cash charges of $4.5 million for depreciation and amortization and non-cash charges of $2.5 million for amortization of deferred stock compensation. Net cash used in operating activities in 2002 was primarily the result of a net loss from operations of $40.3 million reduced by an $8.1 million increase in accrued litigation judgment, non-cash charges of $4.5 million for depreciation and amortization and non-cash charges of $4.4 million for amortization of deferred stock compensation.

Our investing activities provided cash of $28.5 million in the year ended December 28, 2003 as compared to cash used of $2.6 million in the year ended December 29, 2002. Cash provided in investing activities in the year ended December 28, 2003 was due primarily to the sale or maturity of investment securities used to provide operating funds for our business, while cash used in the year ended December 29, 2002 was due primarily to the purchase of a new facility offset by maturities of investment securities. Capital expenditures were $2.0 million in 2003 and are expected to increase $1 to $2 million in 2004.

Our financing activities provided $0.2 million in the year ended December 28, 2003 as compared to $26.1 million in the year ended December 29, 2002. Cash provided by financing activities in the year ended December 29, 2002 resulted primarily from $26.0 million in loan proceeds related to the purchase of our new facility.

In June 2002, we recorded a $7.7 million charge to cover total damages and estimated expenses related to a termination-of-employment lawsuit. As a result of our decision to appeal the ruling, we filed a surety bond with the court on October 25, 2002 of 1.5 times the judgment amount, or approximately $11.3 million. Under the terms of the bond, we are required to maintain a letter of credit for 90% of the bond amount to secure the bond. Further, we were required to deposit approximately $12.5 million of marketable securities as collateral for the letter of credit and accordingly, these funds will be restricted from use for corporate purposes until the appeal process is completed. If a judgment is due, we expect payment will occur within 12 to 18 months.

As of the end of 2003, we had funding remaining under existing NIH grants of approximately $6.5 million, including $5.4 million available under the International HapMap Project. All of these amounts are scheduled to be paid in 2004, subject to the actual amount of activities we perform under these grants.

Based on our current operating plans, we expect that our current cash and cash equivalents, investments, revenues from sales and funding from grants will be sufficient to fund our anticipated operating needs for at least 18 to 24 months. Operating needs include the planned costs to operate our business including amounts required to fund working capital and capital expenditures. At the current time, we have no material commitments for capital expenditures. However, our future capital requirements and the adequacy of our available funds will depend on many factors, including our ability to successfully commercialize our SNP genotyping laboratory and gene expression systems and extensions to those products and to expand our oligonucleotide and SNP genotyping services product lines, scientific progress in our research and development programs, the magnitude of those programs, competing technological and market developments, the successful resolution of our legal proceedings with Applied Biosystems and the successful resolution of our appeal in a termination of employment lawsuit. Therefore, we may require additional funding within this time frame and the additional funding, if needed, may not be available on terms that are acceptable to us, or at all. Further, any additional equity financing may be dilutive to our then existing stockholders and may adversely affect their rights.

On December 23, 2003, we filed a shelf registration statement that would allow us to raise up to $65 million of funding through the sale of common stock in one or more transactions. We currently do not have formal arrangements to sell securities under the registration statement, but if market and other business conditions become favorable within the next several months, we could put such arrangements in place and attempt to raise at least a portion of the funds covered by the registration statement.

Contractual Obligations

In April 2000, we entered into a $3.0 million loan arrangement to be used at our discretion to finance purchases of capital equipment, $1.7 million of which remains available at December 28, 2003.

In January 2002, we purchased two newly constructed buildings and assumed a $26.0 million, 10-year mortgage on the property at a fixed interest rate of 8.36% which calls for principal and interest

payments of approximately $2.5 million per year until the loan expires in January 2012 at which time a balloon payment of $21.2 million will be due.

We also lease office space under non-cancelable operating leases that expire at various times through December 2006. These leases contain renewal options ranging from 2 to 3 years.

As of December 28, 2003, our contractual obligations are (in thousands);

	Payments Due by Period				
Contractual Obligation	Total	Less Than 1 Year	1 – 3 Years	3 – 5 Years	More Than 5 Years
Long term debt	$41,519	$2,508	$5,016	$5,016	$28,979
Capital lease obligations	263	263	—	—	—
Operating leases	462	360	65	37	—
Total	$42,244	$3,131	$5,081	$5,053	$28,979

Critical Accounting Policies

Revenue Recognition. We recognize revenue in accordance with the guidelines established by SEC Staff Accounting Bulletin (SAB) No. 101. Under SAB 101, revenue cannot be recorded until all of the following criteria have been met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the seller's price to the buyer is fixed or determinable; and collectibility is reasonably assured. Product revenue consists of sales of oligonucleotides, array matrices, assay reagents, genotyping systems and gene expression systems. Services revenue consists of revenue received for performing genotyping services. Revenue for product sales is recognized generally upon shipment and transfer of title to the customer, provided no significant obligations remain and collection of the receivables is reasonably assured. BeadLab genotyping system revenue is recognized when earned, which is generally upon shipment, installation, training and fulfillment of contractually defined acceptance criteria. Reserves are provided for anticipated product warranty expenses at the time the associated revenue is recognized. Revenue for genotyping services is recognized generally at the time the genotyping analysis data is delivered to the customer. We have been awarded $9.1 million from the National Institutes of Health to perform genotyping services in connection with the International HapMap Project. A portion of the revenue from this project is earned at the time the related costs are incurred while the remainder of the revenue is earned upon the delivery of genotyping data. Research revenue consists of amounts earned under research agreements with government grants, which is recognized in the period during which the related costs are incurred. All revenues are recorded net of any applicable allowances for returns or discounts.

We received $10 million of non-refundable research funding from Applied Biosystems in connection with a licensing and development contract entered into in 1999. This amount was originally recorded as deferred revenue in accordance with the provisions of SAB 101 and would have been recognized as revenue at a contractually defined rate of 25% of the defined operating profit earned from sales of the products covered by the collaboration agreement, had such sales occurred. At present, we do not believe a collaboration product will be commercialized under the partnership agreement, and there are legal proceedings between the parties as more fully described in ITEM 3, ''Legal Proceedings''. The $10 million of research funding has been reclassified to an advance payment from former collaborator until the legal proceedings have been resolved.

Cash & Investments. We invest our excess cash balances in marketable debt securities, primarily government securities and corporate bonds and notes, with strong credit ratings. We classify our investments as ''Available-for-Sale'' under SFAS 115 and record such investments at the estimated fair value in the balance sheet, with gains and losses, if any, reported in stockholders' equity. We periodically review our investments for other than temporary impairment.

Recently Issued Accounting Standards

In November 2002, the FASB Emerging Issues Task Force issued its consensus concerning *Revenue Arrangements with Multiple Deliverables* (''EITF 00-21''). EITF 00-21 addresses how to determine whether a revenue arrangement involving multiple deliverables should be divided into separate units of accounting, and, if separation is appropriate, how the arrangement consideration should be measured and allocated to the identified accounting units. EITF 00-21 is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The adoption of EITF 00-21 did not have a material impact on our consolidated financial statements.

In November 2002, the FASB issued FASB Interpretation No. 45 (''FIN 45''), *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others.* FIN 45 requires a liability to be recorded in the guarantor's balance sheet upon issuance of a guarantee. In addition, FIN 45 requires disclosures about the guarantees that an entity has issued, including a reconciliation of changes in the entity's product warranty liabilities. The initial recognition and initial measurement provisions of FIN 45 are applicable on a prospective basis to guarantees issued or modified after December 31, 2002. The disclosure requirements of FIN 45 are effective for financial statements ending after December 15, 2002. The adoption of FIN 45 did not have a material impact on our consolidated financial statements.

In April 2003, the FASB issued SFAS No. 149, *Amendment of Statement 133 on Derivative Instruments and Hedging Activities.* SFAS No. 149 amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities under SFAS No. 133. SFAS No. 149 clarifies under what circumstances a contract with an initial net investment meets the characteristic of a derivative as discussed in SFAS No. 133 and when a derivative contains a financing component that warrants special reporting in the statement of cash flows. SFAS No. 149 is effective for contracts entered into or modified after June 30, 2003, for hedging relationships designated after June 30, 2003, and to certain pre-existing contracts. The adoption of SFAS No. 149 did not have a material impact on our consolidated financial statements.

In May 2003, the FASB issued SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity.* SFAS No. 150 affects the issuer's accounting for three types of freestanding financial instruments; (a) mandatorily redeemable shares which the issuing company is obligated to buy back in exchange for cash or other assets, (b) put options and forward purchase contracts that do or may require the issuer to buy back some of its shares in exchange for cash or other assets, and (c) obligations that can be settled with shares, the monetary value of which is fixed, ties solely or predominantly to a variable such as a market index, or varies inversely with the value of the issuer's shares. SFAS No. 150 also requires disclosures about alternative ways of settling the instruments and the capital structure of entities. SFAS No. 150 is effective for all financial instruments entered into or modified after May 31, 2003 and for all periods beginning after June 15, 2003. The adoption of SFAS 150 did not have a material impact on our consolidated financial statements.

In December 2003, the FASB issued a revision to FASB Interpretation No. 46 (''FIN 46R''), *Consolidation of Variable Interest Entities.* FIN 46R replaces FASB Interpretation No. 46, *Consolidation of Variable Interest Entities,* which was issued in January 2003. FIN 46R requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity's activities or entitled to receive a majority of the entity's residual returns or both. A variable interest entity either (a) does not have equity investors with voting rights or (b) has equity investors that do not provide sufficient financial resources to the entity to support its activities. FIN 46R is effective immediately for all new variable interest entities created or acquired after December 31, 2003. The adoption of FIN 46 is not expected to have a material impact on our consolidated financial statements.

Factors Affecting Our Operating Results

In addition to the items mentioned above, the following issues could adversely affect our operating results or our stock price.

We have generated only a small amount of revenue from product and service offerings to date. We expect to continue to incur net losses and we may not achieve or maintain profitability.

We have incurred net losses since our inception and expect to continue to incur net losses. At December 28, 2003, our accumulated deficit was approximately $117.5 million, and we incurred a net loss of $27.1 million for the fiscal year ended December 28, 2003. We expect to continue to incur net losses and negative cash flow for the foreseeable future. The magnitude of our net losses will depend, in part, on the rate of growth, if any, of our revenue and on the level of our expenses. We expect to continue incurring significant expenses for research and development, for developing our manufacturing capabilities and for sales and marketing efforts to commercialize our products. In addition, we expect that our selling and marketing expenses will increase at a higher rate in the future as a result of the launch of our BeadLab and BeadStation SNP genotyping system and gene expression systems. As a result, we expect that our operating expenses will increase significantly as we grow and, consequently, we will need to generate significant additional revenue to achieve profitability. Even if we achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

Our success depends upon the increasing availability of genetic information and the continued emergence and growth of markets for analysis of genetic variation and function.

We design our products primarily for applications in the life sciences and pharmaceutical industries. The usefulness of our technology depends in part upon the availability of genetic data and its usefulness in identifying or treating disease. We are initially focusing on markets for analysis of genetic variation and function, namely SNP genotyping and gene expression profiling. Our first products are being sold into the SNP genotyping and focused-gene expression markets. Both of these markets are new and emerging, and they may not develop as quickly as we anticipate, or reach their full potential. Other methods of analysis of genetic variation and function may emerge and displace the methods we are developing. Also, researchers may not seek or be able to convert raw genetic data into medically valuable information through the analysis of genetic variation and function. If useful genetic data is not available or if our target markets do not develop in a timely manner, demand for our products may grow at a slower rate than we expect, and we may never become profitable.

We are an early stage company with a limited history of commercial sales of systems and consumable products, and our success depends on our ability to develop commercially successful products and on market acceptance of our new and unproven technologies.

We may not possess all of the resources, capability and intellectual property necessary to develop and commercialize all the products or services that may result from our technologies. We only recently sold our first genotyping systems, and some of our other technologies are in the early stages of commercialization or are still in development. You should evaluate us in light of the uncertainties and complexities affecting an early stage company developing tools for the life sciences and pharmaceutical industries. We must conduct a substantial amount of additional research and development before some of our products will be ready for sale. Problems frequently encountered in connection with the development or early commercialization of products and services using new and unproven technologies might limit our ability to develop and successfully commercialize these products and services. In addition, we may need to enter into agreements to obtain intellectual property necessary to commercialize some of our products or services.

Historically, life sciences and pharmaceutical companies have analyzed genetic variation and function using a variety of technologies. Compared to the existing technologies, our technologies are new and relatively unproven. In order to be successful, our products must meet the commercial requirements of the life sciences and pharmaceutical industries as tools for the large-scale analysis of genetic variation and function.

Market acceptance will depend on many factors, including:

- our ability to demonstrate to potential customers the benefits and cost effectiveness of our products and services relative to others available in the market;
- the extent and effectiveness of our efforts to market, sell and distribute our products;
- our ability to manufacture products in sufficient quantities with acceptable quality and reliability and at an acceptable cost; and
- the willingness and ability of customers to adopt new technologies requiring capital investments.

We have limited experience in manufacturing commercial products and services.

We have limited experience manufacturing our products in the volumes that will be necessary for us to achieve significant commercial sales. We have only recently begun manufacturing products on a commercial scale and operating our internal SNP genotyping service product line. For example, in the past we have experienced variations in manufacturing conditions that have temporarily reduced production yields. Due to the intricate nature of manufacturing products that contain DNA, we may encounter similar or previously unknown manufacturing difficulties in the future that could significantly reduce production yields, impact our ability to sell these products, or to produce them economically, may prevent us from achieving expected performance levels or cause us to set prices that hinder wide adoption by customers.

If we are unable to develop our manufacturing capability, we may not be able to launch or support our products in a timely manner, or at all.

We currently possess only one facility capable of manufacturing our products and services for both sale to our customers and internal use. If a natural disaster were to significantly damage our facility or if other events were to cause our operations to fail, these events could prevent us from developing and manufacturing our products and services.

If we are unable to find third-party manufacturers to manufacture components of our products, we may not be able to launch or support our products in a timely manner, or at all.

The nature of our products requires customized components that currently are available from a limited number of sources. For example, we currently obtain the fiber optic bundles and BeadChip slides included in our products from single vendors. If we are unable to secure a sufficient supply of those or other product components, we will be unable to meet demand for our products. We may need to enter into contractual relationships with manufacturers for commercial-scale production of some of our products, or develop these capabilities internally, and we cannot assure you that we will be able to do this on a timely basis, for sufficient quantities or on commercially reasonable terms. Accordingly, we may not be able to establish or maintain reliable, high-volume manufacturing at commercially reasonable costs.

Our current sales, marketing and technical support organization may limit our ability to sell our products.

We currently have limited sales and marketing and technical support services and have only recently established a small direct sales force and customer support team. In order to effectively

commercialize our genotyping and gene expression systems and other products to follow, we will need to expand our sales, marketing and technical support staff both domestically and internationally. We may not be successful in establishing or maintaining either a direct sales force or distribution arrangements to market our products and services. In addition, we compete primarily with much larger companies, that have larger sales and distribution staffs and a significant installed base of products in place, and the efforts from a limited sales and marketing force may not be sufficient to build the market acceptance of our products required to support continued growth of our business.

We expect intense competition in our target markets, which could render our products obsolete or substantially limit the volume of products that we sell. This would limit our ability to compete and achieve profitability. If we cannot continuously develop and commercialize new products, our revenues may not grow as intended.

We compete with life sciences companies that design, manufacture and market instruments for analysis of genetic variation and function and other applications using technologies such as two-dimensional electrophoresis, capillary electrophoresis, mass spectrometry, flow cytometry, microfluidics, and mechanically deposited, inkjet and photolithographic arrays. We anticipate that we will face increased competition in the future as new companies enter the market with new technologies. The markets for our products are characterized by rapidly changing technology, evolving industry standards, changes in customer needs, emerging competition and new product introductions. For example, we expect Affymetrix to release a 100k SNP genotyping chip and several competitors have begun selling a single chip for whole human genome expression which may compete with our SNP genotyping service and product offerings and our gene expression product offerings. One or more of our competitors may render our technology obsolete or uneconomical. Our competitors have greater financial and personnel resources, broader product lines, a more established customer base and more experience in research and development than we have. Furthermore, the life sciences and pharmaceutical companies, which are our potential customers and strategic partners, could develop competing products. If we are unable to develop enhancements to our technology and rapidly deploy new product offerings, our business, financial condition and results of operations will suffer.

We may encounter difficulties in managing our growth. These difficulties could increase our losses.

We expect to experience rapid and substantial growth in order to achieve our operating plans, which will place a strain on our human and capital resources. If we are unable to manage this growth effectively, our losses could increase. Our ability to manage our operations and growth effectively requires us to continue to expend funds to enhance our operational, financial and management controls, reporting systems and procedures and to attract and retain sufficient numbers of talented employees. If we are unable to scale up and implement improvements to our manufacturing process and control systems in an efficient or timely manner, or if we encounter deficiencies in existing systems and controls, then we will not be able to make available the products required to successfully commercialize our technology. Failure to attract and retain sufficient numbers of talented employees will further strain our human resources and could impede our growth.

Any inability to adequately protect our proprietary technologies could harm our competitive position.

Our success will depend in part on our ability to obtain patents and maintain adequate protection of our intellectual property in the United States and other countries. If we do not protect our intellectual property adequately, competitors may be able to use our technologies and thereby erode our competitive advantage. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting their proprietary rights abroad. These problems can be caused by the absence of rules and methods for defending intellectual property rights.

The patent positions of companies developing tools for the life sciences and pharmaceutical industries, including our patent position, generally are uncertain and involve complex legal and factual questions. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. We will apply for patents covering our technologies and products, as we deem appropriate. However, our patent applications may be challenged and may not result in issued patents. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products. There also is risk that others may independently develop similar or alternative technologies or design around our patented technologies.

In April 2003, Applied Biosystems served us with an amended complaint alleging patent infringement, asserting that our genotyping products infringe several patents owned by Applied Biosystems. Others may challenge or invalidate our patents or claim that we infringe the rights of third party patents, however, we are not aware of any other such parties that currently intend to pursue patent infringement claims against us. Also, our patents may fail to provide us with any competitive advantage. We may need to initiate additional lawsuits to protect or enforce our patents, or litigate against third party claims, which would be expensive and, if we lose, may cause us to lose some of our intellectual property rights and reduce our ability to compete in the marketplace.

We also rely upon trade secret protection for our confidential and proprietary information. We have taken security measures to protect our proprietary information. These measures, however, may not provide adequate protection for our trade secrets or other proprietary information. We seek to protect our proprietary information by entering into confidentiality agreements with employees, collaborators and consultants. Nevertheless, employees, collaborators or consultants may still disclose our proprietary information, and we may not be able to meaningfully protect our trade secrets. In addition, others may independently develop substantially equivalent proprietary information or techniques or otherwise gain access to our trade secrets.

Litigation or other proceedings or third party claims of intellectual property infringement could require us to spend significant time and money and could prevent us from selling our products or services.

Our commercial success depends in part on our non-infringement of the patents or proprietary rights of third parties and the ability to protect our own intellectual property. Applied Biosystems has served us with an amended complaint alleging patent infringement and other third parties have or may assert that we are employing their proprietary technology without authorization. In addition, third parties have or may obtain patents in the future and claim that use of our technologies infringes these patents. We could incur substantial costs and divert the attention of our management and technical personnel in defending ourselves against any of these claims. We may incur the same costs and diversions in enforcing our patents against others. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which effectively could block our ability to further develop, commercialize and sell products, and could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties, or be prohibited from selling certain products. We may not be able to obtain these licenses at a reasonable cost, or at all. In that event, we could encounter delays in product introductions while we attempt to develop alternative methods or products. Defense of any lawsuit or failure to obtain any of these licenses could prevent us from commercializing available products, and the prohibition of sale of any of our products could materially affect our ability to grow and to attain profitability.

We may need additional capital in the future. If additional capital is not available on acceptable terms, we may have to curtail or cease operations.

Our future capital requirements will be substantial and will depend on many factors including our ability to successfully market our genetic analysis systems and services, the need for capital expenditures to support and expand our business, the progress and scope of our research and development projects, the filing, prosecution and enforcement of patent claims, the success of our legal proceedings with Applied Biosystems and the appeal of a wrongful termination lawsuit. We anticipate that our existing capital resources will enable us to maintain currently planned operations for at least 18 to 24 months. However, we premise this expectation on our current operating plan, which may change as a result of many factors. Consequently, we may need additional funding sooner than anticipated. Our inability to raise capital would seriously harm our business and product development efforts. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity, the issuance of these securities could result in dilution to our stockholders.

We currently have no credit facility or committed sources of capital other than an equipment lease line with $1.7 million unused and available as of December 28, 2003. To the extent operating and capital resources are insufficient to meet future requirements; we will have to raise additional funds to continue the development and commercialization of our technologies. These funds may not be available on favorable terms, or at all. If adequate funds are not available on attractive terms, we may be required to curtail operations significantly or to obtain funds by entering into financing, supply or collaboration agreements on unattractive terms.

If we lose our key personnel or are unable to attract and retain additional personnel, we may be unable to achieve our goals.

We are highly dependent on our management and scientific personnel, including Jay Flatley, our president and chief executive officer, David Barker, our vice president and chief scientific officer, and John Stuelpnagel, our senior vice president of operations. The loss of their services could adversely impact our ability to achieve our business objectives. We will need to hire additional qualified personnel with expertise in molecular biology, chemistry, biological information processing, sales, marketing and technical support. We compete for qualified management and scientific personnel with other life science companies, universities and research institutions, particularly those focusing on genomics. Competition for these individuals, particularly in the San Diego area, is intense, and the turnover rate can be high. Failure to attract and retain management and scientific personnel would prevent us from pursuing collaborations or developing our products or technologies.

Our planned activities will require additional expertise in specific industries and areas applicable to the products developed through our technologies, including the life sciences and healthcare industries. Thus, we will need to add new personnel, including management, and develop the expertise of existing management. The failure to do so could impair the growth of our business.

A significant portion of our sales are to international customers.

Approximately $14.4 million of our 2003 revenues were derived from customers outside the United States. We intend to continue to expand our international presence and export sales to international customers and we expect the total amount of non-U.S. sales to continue to grow. Export sales entail a variety of risks, including:

- currency exchange fluctuations;
- unexpected changes in legislative or regulatory requirements of foreign countries into which we import our products;

- difficulties in obtaining export licenses or other trade barriers and restrictions resulting in delivery delays; and
- significant taxes or other burdens of complying with a variety of foreign laws.

In addition, sales to international customers typically result in longer payment cycles and greater difficulty in accounts receivable collection. We are also subject to general geopolitical risks, such as political, social and economic instability and changes in diplomatic and trade relations. One or more of these factors could have a material adverse effect on our business, financial condition and operating results.

We expect that our results of operations will fluctuate. This fluctuation could cause our stock price to decline.

A significant portion of our current revenue is derived from a few large, individual transactions such as the sale of production genotyping systems and large genotyping services contracts, including our work on the International HapMap Project. Because these transactions do not occur regularly and there is a lengthy sales cycle for such transactions, revenue of these types may not occur on a consistent or frequent basis. In addition, our total amount of revenues is subject to fluctuations in demand from seasonality impacts, the timing and amount of U.S. government grant funding programs, the timing and size of research projects our customers perform and changes in overall spending levels in the life sciences industry. Given the difficulty in predicting the timing and magnitude of sales for our products, we may experience quarter-to-quarter fluctuations in revenue resulting in the potential for a sequential decline in quarterly revenue. A large portion of our expenses are relatively fixed, including expenses for facilities, equipment and personnel. In addition, we expect operating expenses to continue to increase significantly. Accordingly, if revenue does not grow as anticipated, we may not be able to reduce our operating losses. Due to the possibility of fluctuations in our revenue and expenses, we believe that quarterly comparisons of our operating results are not a good indication of our future performance. If our operating results fluctuate or do not meet the expectations of stock market analysts and investors, our stock price probably would decline.

Item 7A. ***Quantitative and Qualitative Disclosure about Market Risk.***

Our exposure to market risk for changes in interest rates relates primarily to our investment portfolio. The fair market value of fixed rate securities may be adversely impacted by fluctuations in interest rates while income earned on floating rate securities may decline as a result of decreases in interest rates. Under our current policies, we do not use interest rate derivative instruments to manage exposure to interest rate changes. We ensure the safety and preservation of our invested principal funds by limiting default risk, market risk and reinvestment risk. We mitigate default risk by investing in investment grade securities. A hypothetical 100 basis point adverse move in interest rates along the entire interest rate yield curve would not materially affect the fair value of our interest sensitive financial instruments.

Our equipment financings, amounting to $0.3 million as of December 28, 2003, are all at fixed rates and therefore, have no exposure to changes in interest rates. In January 2002, we assumed a $26.0 million mortgage in connection with the purchase of a new facility and related land. The interest rate on this loan is fixed for a 10-year period and consequently there is no exposure to increasing market interest rates.

We have not had any significant exposure to foreign currency rate fluctuations, nor do we have any foreign currency hedging instruments in place.

Item 8. ***Financial Statements and Supplementary Data.***

The Report of Independent Auditors, Financial Statements and Notes to Financial Statements begin on page F-1 immediately following the signature page and are incorporated here by reference.

Our fiscal year is 52 or 53 weeks ending on the Sunday closest to December 31. Our quarters are 13 or 14 weeks ending on the Sunday closest to March 31, June 30 and September 30.

Item 9. ***Changes In and Disagreements With Accountants on Accounting and Financial Disclosure.***

Not applicable.

Item 9A. ***Controls and Procedures.***

We have established and maintain disclosure controls and procedures to ensure that we record, process, summarize, and report information we are required to disclose in our periodic reports filed with the Securities and Exchange Commission in the manner and within the time periods specified in the SEC's rules and forms. We also design our disclosure controls to ensure that the information is accumulated and communicated to our management, including the chief executive officer and the chief financial officer, as appropriate to allow timely decisions regarding required disclosure. We also maintain internal controls and procedures to ensure that we comply with applicable laws and our established financial policies. We design our internal controls to provide reasonable assurance that (1) our transactions are properly authorized; (2) our assets are safeguarded against unauthorized or improper use; and (3) our transactions are properly recorded and reported in conformity with accounting principles generally accepted in the United States.

We have evaluated the design and operation of our disclosure controls and procedures to determine whether they are effective in ensuring that the disclosure of required information is timely made in accordance with the Exchange Act and the rules and regulations of the Securities and Exchange Commission. This evaluation was made under the supervision and with the participation of management, including our chief executive officer and chief financial officer as of December 28, 2003. Our management does not expect that our disclosure controls or our internal controls will prevent all error and all 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 costs. 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, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. 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, controls may become inadequate because of changes in conditions, or the degree of compliance with the 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. Notwithstanding, we have designed our internal control system with a level of controls that we believe will prevent material errors in our consolidated financial statements.

The chief executive officer and chief financial officer have concluded, based on their review, that our disclosure controls and procedures, as defined at Exchange Act Rules 13a-14(c) and 15d-14(c), are effective to ensure that information required to be disclosed by us in reports that we file under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and that our internal controls are effective to provide reasonable assurance that our financial statements are fairly presented in conformity with accounting principles generally accepted in the United States. No significant changes were made to our internal controls or other factors that could significantly affect these controls during the fourth quarter of 2003.

PART III

Item 10. *Directors and Executive Officers of the Registrant.*

Identification of Directors

Our certificate of incorporation and bylaws provide for a classified board of directors consisting of three classes of directors with staggered three-year terms. The board currently consists of seven persons, with two classes consisting of two directors each and the third class consisting of three directors. Robert T. Nelsen has informed the board that he will not serve on the board after the annual meeting to be held on May 20, 2004. As a result, his term will expire as of the annual meeting, and the board will consist of six persons following the 2004 annual meeting.

Daniel M. Bradbury, 42, has been a director since January 2004. Since June 2003, Mr. Bradbury has served as Chief Operating Officer of Amylin Pharmaceuticals, a biopharmaceutical company. He served in various other positions with that company from 1994 to 2003. From 1984 to 1994, Mr. Bradbury held a number of positions at SmithKline Beecham Pharmaceuticals. Mr. Bradbury is a director of Peninsula Pharmaceuticals. Mr. Bradbury holds a B.Pharm. (Hons.) from Nottingham University and a Diploma in Management Studies from Harrow and Ealing Colleges of Higher Education and is a member of the Royal Pharmaceutical Society of Great Britain.

Jay T. Flatley, 51, has served as our President, Chief Executive Officer and a director since October 1999. Prior to joining Illumina, Mr. Flatley was co-founder, President, Chief Executive Officer and a director of Molecular Dynamics, a life sciences company, from May 1994 to September 1999. He served in various other positions with that company from 1987 to 1994. From 1985 to 1987, Mr. Flatley was Vice President of Engineering and Vice President of Strategic Planning at Plexus Computers, a UNIX computer company. Mr. Flatley holds a B.A. in Economics from Claremont McKenna College and a B.S. and M.S. in Industrial Engineering from Stanford University.

R. Scott Greer, 45, has been a director since May 2001. Mr. Greer has served as Chairman of the Board of Abgenix, Inc. since May 2000, as a director since June 1996 and as its Chief Executive Officer from June 1996 to May 2002. From June 1996 until December 2000, he served as its President. He also serves as a director of CV Therapeutics, Inc. and Sirna Therapeutics, Inc. From July 1994 to July 1996, Mr. Greer was Senior Vice President of Corporate Development at Cell Genesys, Inc. From April 1991 to July 1994, Mr. Greer was Vice President of Corporate Development and from April 1991 to September 1993 Mr. Greer was Chief Financial Officer of Cell Genesys. From 1986 to 1991, Mr. Greer held various positions at Genetics Institute, Inc., a biotechnology company, including Director, Corporate Development. Mr. Greer received a B.A. in Economics from Whitman College and an M.B.A. from Harvard University and was a certified public accountant.

Robert T. Nelsen, 40, has been a director since June 1998. Since July 1994, Mr. Nelsen has served as a senior principal of venture capital funds associated with ARCH Venture Partners, a venture capital firm, including ARCH Venture Fund III, L.P., a stockholder of the Company. From April 1987 to July 1994, Mr. Nelsen was Senior Manager at ARCH Development Corporation, a company affiliated with the University of Chicago, where he was responsible for new company formation. Mr. Nelsen is a director of Adolor. Mr. Nelsen holds a B.S. in Biology and Economics from the University of Puget Sound and an M.B.A. from the University of Chicago.

William H. Rastetter, Ph.D., 55, has been a director since November 1998. Since November 2003, Dr. Rastetter has served as the Executive Chairman of Biogen Idec Inc, a biopharmaceutical company. He served as Chief Executive Officer of IDEC Pharmaceuticals Corporation from December 1986 through November 2003 and as Chairman of the board of directors from May 1996 to November 2003. Additionally, he served as President of IDEC Pharmaceuticals from 1986 through 2002. From 1982 to 1986, Dr. Rastetter served in various positions at Genentech and previously he was an associate professor at the Massachusetts Institute of Technology. Dr. Rastetter holds a S.B. in

Chemistry from the Massachusetts Institute of Technology and received his M.A. and Ph.D. in Chemistry from Harvard University.

John R. Stuelpnagel, D.V.M., 46, one of our founders, is our Sr. Vice President of Operations and has been a director since April 1998. From October 1999 to April 2002, he served as our Vice President of Business Development. From April 1998 to October 1999, he served as our acting President and Chief Executive Officer and was acting Chief Financial Officer through April 2000. While founding Illumina, Dr. Stuelpnagel was an associate with CW Group, a venture capital firm, from June 1997 to September 1998 and with Catalyst Partners, a venture capital firm, from August 1996 to June 1997. Dr. Stuelpnagel received his B.S. in Biochemistry and his Doctorate in Veterinary Medicine from the University of California, Davis and his M.B.A. from the University of California, Los Angeles.

David R. Walt, Ph.D., 51, one of our founders, has been a director and Chairman of our Scientific Advisory Board since June 1998. Dr. Walt has been the Robinson Professor of Chemistry at Tufts University since September 1995. Dr. Walt has published over 100 papers and holds over 20 patents. Dr. Walt holds a B.S. in Chemistry from the University of Michigan and received his Ph.D. in Organic Chemistry and Pharmacology from the State University of New York at Stony Brook.

Board Committees and Meetings

The board of directors held five meetings during the fiscal year ended December 28, 2003. The board of directors has an audit committee and a compensation committee. Each director attended or participated in 75% or more of the aggregate of (i) the total number of meetings of the board of directors and (ii) the total number of meetings held by all committees of the board on which such director served during the 2003 fiscal year.

The audit committee currently consists of three directors, Mr. Greer, Mr. Nelsen and Dr. Rastetter, each of whom is independent as defined under Rule 4200 of the National Association of Securities Dealers' listing standards and Rule 10A-3 of the Exchange Act. The Board of Directors has determined that all audit committee members are financially literate under the current listing standards of the National Association of Securities Dealers. The Board also determined that R. Scott Greer qualifies as an ''audit committee financial expert'' as defined by the SEC rules adopted pursuant to the Sarbanes-Oxley Act of 2002. The audit committee is responsible for approving the services performed by our independent auditors and reviewing our accounting practices and systems of internal accounting controls. The audit committee held eight meetings during 2003. The audit committee is governed by a written charter approved by the board of directors.

The compensation committee currently consists of Mr. Nelsen and Dr. Rastetter. The compensation committee is primarily responsible for reviewing and approving our general compensation policies and setting compensation levels for our executive officers. The compensation committee also has the authority to administer our 2000 employee stock purchase plan and our 2000 stock plan. The compensation committee held one meeting during 2003.

Director Compensation

Each non-employee director receives an annual cash retainer fee of $10,000 per year, which is paid quarterly. Non-employee directors also receive $2,000 for each Board meeting attended and $1,000 for each Board committee meeting attended. We also reimburse our non-employee directors for their expenses incurred in connection with attending board and committee meetings. Several directors have purchased shares of our common stock pursuant to restricted stock purchase agreements, subject to repurchase rights in our favor which lapse over time. David R. Walt, as a member of our Scientific Advisory Board, has received an annual consulting fee of $50,000, which will terminate in April 2004.

Under our 2000 stock plan, as amended, directors who are not our officers or employees receive:

- one-time option grants of 20,000 shares vesting annually over four years upon joining the board, which are to be automatically granted on the date of the first board meeting attended, with exercise prices equal to the fair market value of our common stock on the date of grant; and

- annual option grants of 10,000 shares vesting annually over four years, which are to be automatically granted on the date of each annual stockholder meeting with exercise prices equal to the fair market value of our common stock on the date of grant.

On the date of the annual meeting, our existing non-employee board members, Mr. Bradbury, Mr. Nelsen, and Dr. Rastetter and, if re-elected, Mr. Greer and Dr. Walt, will automatically receive option grants of 10,000 shares of our common stock. The exercise price per share under each such option will be equal to the fair market value per share of common stock on the grant date.

Identification of Executive Officers

Information concerning our executive officers is set forth under ''Executive Officers'' in Part I of this Annual Report on Form 10-K.

Compliance with Section 16(a) of the Exchange Act

The members of our board of directors, our executive officers and persons who hold more than 10% of our outstanding common stock are subject to the reporting requirements of Section 16(a) of the Securities Exchange Act which require them to file reports with respect to their ownership of our common stock and their transactions in such common stock. Based solely upon our review of copies of Section 16(a) reports, which we received from such persons for their transactions during the 2003 fiscal year, we believe that all reporting requirements under Section 16(a) for such fiscal year were met in a timely manner by these individuals, with the following exception, a Form 4 covering the sale of 5,275 shares of the Company's stock by Noemi Espinosa was filed 15 days late on December 11, 2003.

Code of Ethics

The Company has adopted a Code of Ethics that applies to all officers and employees, including its principal executive officer and principal accounting and financial officer. This code of ethics is filed as Exhibit 14 to this annual report on Form 10-K.

Item 11. *Executive Compensation.*

Summary of Cash and Certain Other Compensation

The following table provides summary information concerning the compensation earned by our chief executive officer and each of our four other most highly compensated executive officers whose salary and bonus for the 2003 fiscal year was in excess of $100,000, for services rendered in all capacities, to Illumina. No executive officer who would have otherwise been includable in such table on the basis of salary and bonus earned for the 2003 fiscal year has been excluded by reason of his or her termination of employment or change in executive status during that fiscal year. The individuals included in the following table are referred to as named executive officers.

Summary 2003 Compensation Table

		Annual Compensation ($)			Long Term Compensation Awards Securities Underlying
Name and Principal Positions	Year	Salary	Bonus(1)	Other Annual Compensation	Options (#)
Jay T. Flatley, ...	2003	$360,400	$ 96,107	$22,453(2)	150,000
President and Chief	2002	340,000	119,000	7,547(2)	—
Executive Officer	2001	299,519	82,500	—	150,000
David L. Barker, ...	2003	220,000	22,000	—	40,000
Vice President and	2002	210,000	15,750	—	—
Chief Scientific Officer	2001	200,000	10,000	—	75,000
Noemi C. Espinosa, ...	2003	220,000	14,667	4,154(3)	25,000
Vice President of	2002	210,000	12,600	4,038(3)	—
Intellectual Property	2001	200,000	10,000	—	25,000
Timothy M. Kish,.....	2003	250,000	33,333	—	50,000
Vice President of Finance	2002	236,250	17,719	—	—
and Chief Financial Officer	2001	225,000	11,250	—	75,000
John R. Stuelpnagel, ...	2003	250,000	33,333	7,231(3)	75,000
Senior Vice President	2002	220,000	22,000	3,885(3)	—
of Operations	2001	189,712	9,500	7,673(3)	75,000

(1) Bonuses are earned in the year indicated and paid in February of the following year.

(2) This amount represents an allowance for relocation and housing.

(3) Payment for flexible time off.

Stock Option Grants

We grant options to our executive officers under our 2000 stock plan. As of January 31, 2004, options to purchase a total of 5,952,627 shares of our common stock were outstanding under the stock plan and options to purchase 6,299,552 shares of our common stock remained available for future grant.

The following tables show for the 2003 fiscal year, information regarding options granted to, exercised by, and held at year end by, each of the named executive officers. No stock appreciation rights were granted to the named executive officers during the 2003 fiscal year.

The exercise price of each option was equal to the closing sales price of our common stock as reported on the Nasdaq Stock Market on the date of grant. The exercise price may be paid in cash or through a cashless exercise procedure involving a same-day sale of the purchased shares. The options vest ratably over a 60-month period, beginning March 2003. Each of the options has a maximum term of 10 years measured from the applicable grant date, subject to earlier termination if the optionee's service with us ceases. In the event that we are acquired by merger or asset sale, each outstanding

option which is not to be assumed by the acquiring entity will become immediately fully vested and exercisable.

The potential realizable value is calculated based on the 10-year term of the option at the time of grant. Stock price appreciation of 5% and 10% is assumed under the SEC rules and does not represent our prediction of our stock price performance. The potential realizable value at 5% and 10% appreciation are calculated by assuming that the stock price on the date of grant appreciates at the indicated annual rate, compounded annually for the entire term of the option and that the option is exercised and sold on the last day of its term for the appreciated stock price. There can be no assurance provided to any named executive officer or other holder of our securities that the actual stock price appreciation over the 10-year term will be at the assumed 5% and 10% levels or at any other defined level. Unless the market price of the common stock appreciates over the option term, no value will be realized from the option grants made to the named executive officers. On December 26, 2003, the last trading day of our 2003 fiscal year, the closing sales price of our common stock, as reported on the Nasdaq National Market, was $7.01.

Percentages shown under ''Percentage of Total Options Granted in 2003'' are based on an aggregate of 1,199,275 options granted to employees of Illumina under our stock option plans during 2003.

	Individual Grants					
Name	Number of Securities Underlying Options Granted	Percentage of Total Options Granted to Employees in Fiscal Year	Exercise Price ($/Share)	Expiration Date	Value at Assumed Annual Rates of Stock Appreciation for Option Term 5% ($)	10% ($)
Jay T. Flatley	150,000	12.51%	$2.77	02/10/2013	261,306	662,200
David L. Barker, Ph.D.	40,000	3.34%	2.77	02/10/2013	69,682	176,587
Noemi C. Espinosa	25,000	2.08%	2.77	02/10/2013	43,551	110,367
Timothy M. Kish	50,000	4.17%	2.77	02/10/2013	87,102	220,733
John R. Stuelpnagel, D.V.M	75,000	6.25%	2.77	02/10/2013	130,653	331,100

Aggregate Option Exercises in 2003 and Option Values at December 28, 2003

The following table presents the number and value of securities underlying unexercised options that are held by each of the named executive officers. No options were exercised by any of the named executive officers and no stock appreciation rights were outstanding during the 2003 fiscal year.

Amounts shown under the column ''Value of Unexercised In-the-Money Options at December 28, 2003'' are based on the closing price of our common stock of $7.01 on December 26, 2003, the last trading day of our 2003 fiscal year, as reported on the Nasdaq National Market, less the exercise price paid for such shares, without taking into account any taxes that may be payable in connection with the transaction, multiplied by the number of shares underlying the option.

	Number of Securities Underlying Unexercised Options at December 28, 2003		Value of Unexercised In-The-Money Options at December 28, 2003	
Name	Exercisable	Unexercisable	Exercisable	Unexercisable
Jay T. Flatley	51,694	248,406	$133,126	$655,874
David L. Barker, Ph.D.	18,123	96,877	39,950	206,150
Noemi C. Espinosa	9,061	40,939	22,657	108,843
Timothy M. Kish	8,333	116,667	35,332	253,168
John R. Stuelpnagel, D.V.M	23,540	126,460	64,261	330,239

Employment Contracts, Termination of Employment and Change in Control Arrangements

We have not entered into employment agreements with any of our named executive officers.

We have entered into restricted stock purchase agreements with several of our executive officers, including each of our named executive officers, providing that upon the closing of an acquisition of Illumina for cash or publicly traded securities, the lapsing of our repurchase right accelerates as to 50% of each officer's shares of common stock then subject to our repurchase right and, with respect to the remaining 50%, on the first anniversary of the closing date of the acquisition. If the acquirer terminates the officer's employment without cause within one year of the closing date, our repurchase right lapses with respect to all shares.

The compensation committee of the board of directors, as plan administrator of our stock plans, has the authority to provide for accelerated vesting of any outstanding options or waiver of forfeiture restrictions of unvested stock held by our executive officers, for any reason, including upon a change of control.

Compensation Committee Interlocks and Insider Participation

Our executive compensation program has been administered by the compensation committee of our board of directors. As of December 28, 2003, the compensation committee consisted of Mr. Nelsen and Dr. Rastetter. Neither of these individuals was an employee or an officer of ours.

None of our current executive officers has ever served as a member of a board of directors or compensation committee of any other entity that has or has had one or more executive officers serving as a member of our board of directors or compensation committee during the last fiscal year.

Board Compensation Committee Report on Executive Compensation

The compensation committee's responsibility is to administer and review the base salaries, annual incentive compensation and long-term incentives of our executive officers, including our chief executive officer, and to establish the general compensation policies for such individuals. The compensation committee also has the authority to make discretionary option grants to our executive officers under our 2000 stock plan.

Compensation Philosophy. Our philosophy is to maintain an executive compensation program that allows us to attract, retain and reward executive officers who contribute to our long-term success and to link that compensation to both individual performance and the value created for our stockholders. We have adopted a challenging strategy with an aggressive set of underlying goals and our success will in large part be determined by the quality of personnel we are able to recruit. A competitive compensation program will be a crucial part of recruiting the people required to help us achieve these goals.

Our compensation program consist of three elements; base salary, incentive bonuses and long-term equity incentives. In general, our goal is to provide a total compensation package that is competitive with the biotechnology and life science instrumentation companies with which we compete for talent.

Base Salary. The salaries for executive officers for 2003 were generally determined on an individual basis by the compensation committee. Determinations of appropriate base salary levels are made based on level of responsibility, prior experience and breadth of knowledge as well as competitive pay practices in our industry. Initial salary levels are set at the market average when compared to leading companies in our industry, adjusted for size. Subsequent changes to base salary are based on individual performance measured against pre-established objectives and competitive factors at the time.

Incentive Bonus. The compensation committee in its discretion may award bonuses to executive officers. The intent of the bonus program is to motivate and reward executives for performance as

measured against well defined performance goals. The goals are based on both individual milestones that vary with the individual's position as well as our overall financial performance.

Long-Term Equity Incentives. Stock options and stock ownership are a key element in our total compensation program as it links the interests of the executive with the long-term interests of the stockholders and emphasizes the creation of stockholder value. Prior to our initial public offering, executives were provided the opportunity to purchase restricted stock at the date of hire and at other times after that date. Subsequent to our initial public offering, we have granted stock options to executives under the 2000 stock plan at both the time of hire and as subsequent awards. Grants are awarded based on a number of factors, including our achievement of specific milestones, the individual's level of responsibility, the amount and term of stock or options already held by the individual, the individual's contributions to the achievement of our financial and strategic objectives, and industry practices and norms. The size of option grants to executives is determined by the compensation committee. Options are granted at 100% of the fair market value on the date of grant. Option grants to executives generally vest over periods ranging from five to eight years, with opportunities in some cases for earlier vesting based upon the achievement of specified goals.

CEO Compensation. The compensation of Jay T. Flatley, our chief executive officer, is established consistent with Illumina's general compensation philosophy. In setting that salary, the compensation committee considered several factors, including the achievement of company goals during 2003, such as exceeding the 2003 sales goal for SNP genotyping systems and the launch of several new products, as well as the level of leadership and management required to complete development of our technology and commercialize our products. Mr. Flatley's salary was increased from $340,000 in 2002 to $360,400 in 2003 in recognition of these and other competitive factors. Mr. Flatley also received a $96,107 bonus in 2003 based on the same incentive plan as the other executive officers.

Compliance with Internal Revenue Code Section 162(m). Section 162(m) of the Internal Revenue Code disallows a tax deduction to publicly held companies for compensation paid to specified executive officers, to the extent that compensation exceeds $1 million per covered officer in any fiscal year. The limitation applies only to compensation that is not considered to be performance-based. Non-performance based compensation paid to our executive officers for the 2003 fiscal year did not exceed the $1 million limit per officer. The compensation committee does not anticipate that the non-performance based compensation to be paid to our executive officers for fiscal year 2004 will exceed that limit. Our stock option plans have been structured so that any compensation deemed paid in connection with the exercise of option grants made under those plan with an exercise price equal to the fair market value of the option shares on the grant date will qualify as performance-based compensation which will not be subject to the $1 million limitation. The compensation committee's present intention is to grant future compensation that does not exceed the limitations of Section 162(m), although the compensation committee reserves the right to award compensation that does not comply with these limits on a case-by-case basis.

It is the opinion of the compensation committee that the executive compensation policies and plans provide the necessary total remuneration program to properly align our performance and the interests of our stockholders through the use of competitive and equitable executive compensation in a balanced and reasonable manner, for both the short and long-term.

We conclude our report with the acknowledgement that no member of the compensation committee is a current officer or employee of Illumina.

COMPENSATION COMMITTEE
Robert T. Nelsen
William H. Rastetter, Ph.D.

Audit Committee Report

The audit committee oversees our financial reporting process on behalf of our board of directors. Management has primary responsibility for the financial reporting process including the systems of internal controls. In fulfilling its oversight role, the audit committee monitors and advises the board of directors on the integrity of the Company's financial statements and disclosures, the independent auditor's qualifications and independence, the adequacy of the Company's internal controls, and the Company's compliance with legal and regulatory requirements. The audit committee has the following responsibilities, among others:

- reviewing with management and the independent auditor the audited financial statements in the Annual Report and the reviewed financial statements in the quarterly reports, including a discussion of the quality, not just the acceptability, of the accounting principles, the reasonableness of significant judgments, and the clarity of disclosures in the financial statements;
- reviewing with management and the independent auditor the earnings press releases as well as other financial information provided to the public;
- reviewing with management and the independent auditor significant financial reporting issues and judgments made in connection with the preparation of the Company's financial statements;
- reviewing with management and the independent auditor the Company's application of critical accounting policies including consistency from period to period and compatibility with generally accepted accounting principles;
- reviewing with the independent auditor matters relating to the conduct of the audit, including the overall scope of the audit, any difficulties encountered in the course of the audit work, any restriction on the scope of the audit, and any significant disagreements with management;
- assessing auditor independence and absence of conflicts of interest;
- recommending, for shareholder approval, the independent auditor to examine the Company's accounts, controls and financial statements;
- pre-approving any audit and permitted non-audit services provided to the Company by its independent auditor;
- obtaining from the independent auditor a written report on the Company's internal accounting controls;
- reviewing with management the Company's system of internal accounting controls and disclosure controls; and
- establishing procedures for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters.

The audit committee meets with the independent auditors, with and without our management present, to discuss the results of their examinations, their evaluations of our internal controls, and the overall quality of our financial reporting.

Based on the reviews and discussions referred to above, the audit committee recommended to the board of directors that the audited financial statements be included in our annual report on Form 10-K for the fiscal year ended December 28, 2003, for filing with the Securities and Exchange Commission.

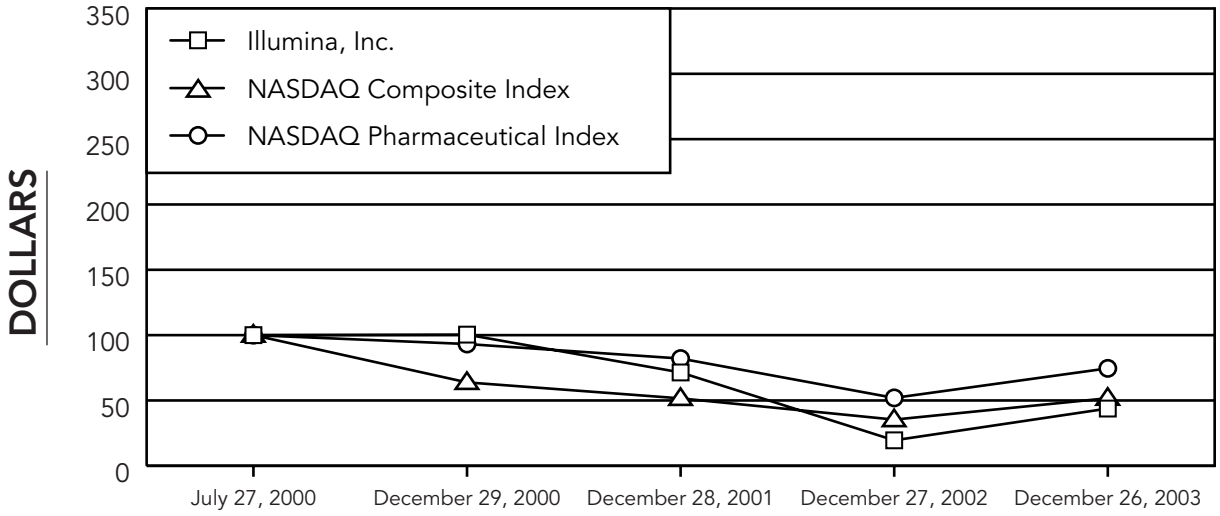
The undersigned members of the audit committee have submitted this report to the board of directors:

AUDIT COMMITTEE
R. Scott Greer
Robert T. Nelsen
William H. Rastetter, Ph.D.

Stock Performance Graph

The graph depicted below shows a comparison of our cumulative total stockholder returns for our common stock, the NASDAQ Stock Market Index, and the NASDAQ Pharmaceutical Index, from the date of our initial public offering on July 27, 2000 through December 26, 2003. The graph assumes that $100 was invested on July 27, 2000, in our common stock and in each index, and that all dividends were reinvested. No cash dividends have been declared on our common stock. Stockholder returns over the indicated period should not be considered indicative of future stockholder returns.

COMPARISON OF TOTAL RETURN AMONG ILLUMINA, INC., THE NASDAQ COMPOSITE INDEX AND THE NASDAQ PHARMACEUTICAL INDEX



	July 27, 2000	December 29, 2000	December 28, 2001	December 27, 2002	December 26, 2003
Illumina, Inc.	100.00	100.39	71.44	19.50	43.81
NASDAQ Composite Index	100.00	63.84	51.60	35.34	51.73
NASDAQ Pharmaceutical Index	100.00	93.20	82.08	51.96	74.57

Item 12. ***Security Ownership of Certain Beneficial Owners and Management.***

The following table sets forth information known to us with respect to the beneficial ownership of our common stock as of January 31, 2004 for:

- each of our directors;
- each of the named executive officers listed in the summary compensation table;
- each stockholder known by us to own beneficially more than 5% of our common stock; and
- all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission and generally includes voting or investment power with respect to securities. Shares of common stock subject to stock options and warrants currently exercisable or exercisable within 60 days from January 31, 2004 are deemed to be outstanding for computing the percentage ownership of the person holding these options and the percentage ownership of any group of which the holder is a member, but are not deemed outstanding for computing the percentage of any other person. Except as indicated by footnote, and subject to community property laws where applicable, the persons named in the table have sole voting and investment power with respect to all shares of common stock shown as beneficially owned by them. Except as otherwise noted below, the address of each person listed on the table is 9885 Towne Centre Drive, San Diego, CA 92121. Some of the shares of common stock held by our directors, officers and consultants are subject to repurchase rights in our favor. For a description of these repurchase rights, see the footnotes below.

		Beneficial Ownership	
Name and Address	Shares Issuable Pursuant to Options Exercisable Within 60 days of January 31, 2004	Number of Shares (including number shown in first column)	Percentage of Total(1)
DIRECTORS AND EXECUTIVE OFFICERS			
Jay T. Flatley(2)	67,219	1,059,722	3.2
David L. Barker, Ph.D.(3)	22,081	275,256	*
Noemi C. Espinosa(4)	11,561	229,924	*
Timothy M. Kish(5)	12,833	407,397	1.2
John R. Stuelpnagel, D.V.M.(6)	31,248	748,211	2.3
Daniel M. Bradbury	—	—	*
R. Scott Greer	12,500	16,500	*
Robert T. Nelsen(7)	7,500	3,333,193	10.1
William H. Rastetter, Ph.D.(8)	7,500	83,012	*
David R. Walt, Ph.D.(9)	7,500	1,409,838	4.3
All directors and executive officers as a group (15 persons)	619,884	8,180,078	24.4
5% STOCKHOLDERS			
ARCH Venture Partners, LLC(10) 8725 West Higgins Road, Suite 290 Chicago, IL 60631	—	3,315,298	10.1
Capital Group International, Inc.(11) 11100 Santa Monica Blvd. Los Angeles, CA 90025	—	3,293,750	10.0
Entities affiliated with CW Group(12) 1041 Third Avenue New York, NY 10021	—	3,005,511	9.1

* Represents beneficial ownership of less than 1% of the outstanding shares of our common stock.

(1) Percentage ownership is based on the 32,900,523 shares of common stock outstanding on January 31, 2004.

(2) Includes 16,500 shares beneficially owned by Mr. Flatley's children. As of January 31, 2004, we have the right to repurchase 170,833 of Mr. Flatley's shares upon termination of Mr. Flatley's services to the Company, which repurchase right lapses over time.

(3) Includes 3,300 shares beneficially owned by a trust for which Dr. Barker is the trustee. As of January 31, 2004, we have the right to repurchase 58,334 of Dr. Barker's shares upon termination of Dr. Barker's services to the Company, which repurchase right lapses over time.

(4) As of January 31, 2004, we have the right to repurchase 53,750 of Ms. Espinosa's shares upon termination of Ms. Espinosa's services to the Company, which repurchase right lapses over time.

(5) Includes 6,000 shares beneficially owned by Mr. Kish's children. As of January 31, 2004, we have the right to repurchase 93,750 of Mr. Kish's shares upon termination of Mr. Kish's services to the Company, which repurchase right lapses over time.

(6) As of January 31, 2004, we have the right to repurchase 60,500 of Dr. Stuelpnagel's shares upon termination of Dr. Stuelpnagel's services to the Company, which repurchase right lapses over time.

(7) Consists of 3,315,298 shares owned by ARCH Venture Fund III, L.P., 10,395 shares owned by Mr. Nelsen and 7,500 shares exercisable within 60 days under options held by Mr. Nelsen. Mr. Nelsen, a director of Illumina, is a managing director of the general partner of ARCH Venture Fund III, L.P. and disclaims beneficial ownership of the shares owned by that fund, except shares attributable to his partnership interests.

(8) As of January 31, 2004, we have the right to repurchase 1,042 of Dr. Rastetter's shares upon termination of Dr. Rastetter's services to the Company, which repurchase right lapses over time.

(9) Includes 303,980 shares beneficially owned by Dr. Walt's wife, 60,000 shares owned by OSCI, Inc. and 31,540 shares beneficially owned by Dr. Walt's children. Dr. Walt is a principal in OSCI, Inc. Dr. Walt disclaims beneficial ownership of the shares held by OSCI, Inc.

(10) Based solely on information contained in Schedule 13G filed by Arch Venture Partners, LLC on February 11, 2004.

(11) Based solely on information contained in Schedule 13G filed by Capital Group International, Inc. on February 13, 2004.

(12) Based solely on information contained in Form 4 filed by CW Ventures III LP on November 12, 2003.

In February 2004, three of our executive officers, Jay T. Flatley, David L. Barker and John R. Stuelpnagel, and one of our directors, David R. Walt, adopted prearranged stock trading plans for the purpose of selling limited amounts of their company stock during a period of approximately 18 months. These written plans were adopted in accordance with Rule 10b5-1 under the Securities and Exchange Act of 1934.

Equity Compensation Plan Information

The following table presents information about our common stock that may be issued upon the exercise of options, warrants and rights under all our existing equity compensation plans as of December 28, 2003. We currently have two equity compensation plans, the 2000 employee stock purchase plan and the 2000 stock plan, Prior to our initial public offering we granted options under the 1998 stock incentive plan. All of these plans have been approved by our stockholders. Options

outstanding include options granted under both the 1998 stock incentive plan and the 2000 stock plan.

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options	(b) Weighted-Average Exercise Price of Outstanding Options	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)
Equity compensation plans approved by security holders	5,229,874	$6.95	5,536,135
Equity compensation plans not approved by security holders	—	—	—
Total	5,229,874	$6.95	5,536,135

Please refer to Footnote 5 in notes to consolidated financial statements included in our annual report on Form 10-K for the year ended December 28, 2003 for a description of our equity compensation plans.

Item 13. ***Certain Relationships and Related Transactions.***

We entered into a license agreement with Tufts University in 1998 in connection with the license of patents filed by Dr. David Walt, one of our directors. Dr. Walt is the Robinson Professor of Chemistry at Tufts. Under that agreement, we pay royalties to Tufts upon the commercial sale of products based on the licensed technology. It is our understanding that Tufts University pays a portion of the royalties received from us to Dr. Walt, the amount of which is controlled solely by Tufts University. We also provided Tufts University with $100,000 per year in funding for five years ending in July 2003 for research support. All future transactions between us and our officers, directors, principal stockholders and affiliates will be approved by a majority of the independent and disinterested members of our board of directors, and will be on terms no less favorable to us than could be obtained from unaffiliated third parties.

Our bylaws provide that we will indemnify our directors and executive officers and may indemnify other officers, employees and other agents to the fullest extent permitted by the Delaware law. We are also empowered under our bylaws to enter into indemnification contracts with our directors and officers and to purchase insurance on behalf of any person whom we are required or permitted to indemnify. Pursuant to this provision, we have entered into indemnity agreements with each of our directors and officers.

In addition, our certificate of incorporation provides that to the fullest extent permitted by Delaware law, our directors will not be liable for monetary damages for breach of their fiduciary duty of care to Illumina and its stockholders. This provision in the certificate of incorporation does not eliminate the duty of care, and in appropriate circumstances equitable remedies such as an injunction or other forms of nonmonetary relief would remain available under Delaware law. Each director will continue to be subject to liability for breach of the director's duty of loyalty to Illumina, for acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, for acts or omissions that the director believes to be contrary to the best interests of Illumina or its stockholders, for any transaction from which the director derived an improper personal benefit, for acts or omissions involving a reckless disregard for the director's duty to Illumina or its stockholders when the director was aware or should have been aware of a risk of serious injury to Illumina or its stockholders, for acts or omissions that constitute an unexcused pattern of inattention that amounts to an abdication of the director's duty to Illumina or its stockholders, for improper transactions between the director and

Illumina and for improper distributions to stockholders and loans to directors and officers. This provision also does not affect a director's responsibilities under any other laws, such as the federal securities laws or state or federal environmental laws.

Item 14. ***Principal Accountant Fees and Services.***

Audit Fees

The aggregate fees billed by Ernst & Young LLP for professional services rendered for the audit of our annual financial statements, the quarterly reviews of the financial statements included in our Forms 10-Q and an A-133 audit required by our government grants were $118,000 and $90,113 for fiscal years 2003 and 2002, respectively.

Audit-Related Fees

The aggregate fees billed by Ernst & Young LLP for audit-related services as defined by the commission were $17,720 and $3,500 for fiscal years 2003 and 2002, respectively.

Tax Fees

The aggregate fees billed by Ernst & Young LLP for professional services rendered for the preparation of our tax returns and tax planning and advice were $25,520 and $20,278 for fiscal years 2003 and 2002, respectively. In 2004 and beyond, all tax related services will be performed by parties other than Ernst & Young.

All Other Fees

Ernst & Young LLP did not perform any professional services other than as stated under the captions Audit Fees, Audit-Related Fees and Tax Fees for fiscal year 2003 or 2002.

Pre Approval Policies and Procedures

The audit committee has adopted a policy that requires advance approval of all audit services and permitted non-audit services to be provided by the independent auditor as required by the Exchange Act. The audit committee must approve the permitted service before the independent auditor is engaged to perform it.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules and Reports on Form 8-K.***

(a) The following documents are filed as a part of this report:

(1) *Consolidated Financial Statements:*

(2) *Financial Statement Schedules:*

(3) *Exhibits:*

Exhibit Number	Description of Document
2.1(1)	Form of Merger Agreement between Illumina, Inc., a California corporation, and Illumina, Inc., a Delaware corporation.
3.1(2)	Amended and Restated Certificate of Incorporation.
3.2(1)	Bylaws.
3.3(5)	Certificate of Designation for Series A Junior Participating Preferred Stock (included as an exhibit to exhibit 4.3).
4.1(1)	Specimen Common Stock Certificate.
4.2(1)	Amended and Restated Investors Rights Agreement, dated November 5, 1999, by and among the Registrant and certain stockholders of the Registrant.
4.3(5)	Rights Agreement, dated as of May 3, 2001, between the Company and Equiserve Trust Company, N.A.
+10.1(1)	Form of Indemnification Agreement between the Registrant and each of its directors and officers.
+10.2(1)	1998 Incentive Stock Plan.
+10.3(2)	2000 Employee Stock Purchase Plan (Filed as Exhibit 99.2).
10.4(1)	Sublease Agreement dated August 1998 between Registrant and Gensia Sicor Inc. for Illumina's principal offices.
10.5(1)	Joint Development Agreement dated November 1999 between Registrant and PE Corporation (with certain confidential portions omitted).
10.6(1)	Asset Purchase Agreement dated November 1998 between Registrant and nGenetics, Inc. (with certain confidential portions omitted).
10.7(1)	Asset Purchase Agreement dated March 2000 between Registrant and Spyder Instruments, Inc. (with certain confidential portions omitted).

Exhibit Number	Description of Document
10.8(1)	License Agreement dated May 1998 between Tufts and Registrant (with certain confidential portions omitted).
10.9(1)	Master Loan and Security Agreement, dated March 6, 2000, by and between Registrant and FINOVA Capital Corporation.
+10.10(3)	2000 Stock Plan (Filed as Exhibit 99.1).
10.11(1)	Eastgate Pointe Lease, dated July 6, 2000, between Diversified Eastgate Venture and Registrant.
10.12(1)	Option Agreement and Joint Escrow Instructions, dated July 6, 2000, between Diversified Eastgate Venture and Registrant.
10.13(4)	First Amendment to Joint Development Agreement dated March 27, 2001 between Registrant and PE Corporation, now known as Applied Biosystems Group (with certain confidential portions omitted).
10.14(6)	First Amendment to Option Agreement and Escrow Instructions dated May 25, 2001 between Diversified Eastgate Venture and Registrant.
10.15(7)	Second Amendment to Option Agreement and Escrow Instructions dated July 18, 2001 between Diversified Eastgate Venture and Registrant.
10.16(7)	Third Amendment to Option Agreement and Escrow Instructions dated September 27, 2001 between Diversified Eastgate Venture and Registrant.
10.17(7)	First Amendment to Eastgate Pointe Lease dated September 27, 2001 between Diversified Eastgate Venture and Registrant.
10.18(8)	Replacement Reserve Agreement, dated as of January 10, 2002, between the Company and BNY Western Trust Company as Trustee for Washington Capital Joint Master Trust Mortgage Income Fund.
10.19(8)	Loan Assumption and Modification Agreement, dated as of January 10, 2002, between the Company, Diversified Eastgate Venture and BNY Western Trust Company as Trustee for Washington Capital Joint Master Trust Mortgage Income Fund.
10.20(8)	Tenant Improvement and Leasing Commission Reserve Agreement, dated as of January 10, 2002, between the Company and BNY Western Trust Company as Trustee for Washington Capital Joint Master Trust Mortgage Income Fund.
+10.21(8)	2000 Employee Stock Purchase Plan as amended on March 21, 2002.
+10.22(8)	2000 Stock Plan as amended on March 21, 2002.
10.23(9)	License Agreement dated January 2002 between Amersham Biosciences Corp. and Registrant (with certain confidential portions omitted).
10.24(9)	License Agreement dated June 2002 between Dade Behring Marburg GmbH and Registrant (with certain confidential portions omitted).
14	Code of Ethics
21	Subsidiaries of the Company.
23.1	Consent of Ernst & Young LLP, Independent Auditors.
24.1	Power of Attorney (included on the signature page).
31	Certification under Section 302 of the Sarbanes-Oxley Act of 2002
32	Certification under Section 906 of the Sarbanes-Oxley Act of 2002

\+ Management contract or corporate plan or arrangement

(1) Incorporated by reference to the same numbered exhibit filed with our Registration Statement on Form S-1 (333-33922) filed April 3, 2000, as amended.

(2) Incorporated by reference to the same numbered exhibit filed with our Annual Report on Form 10-K for the year ended December 31, 2000.

(3) Incorporated by reference to the corresponding exhibit filed with our Registration Statement on Form S-8 filed March 29, 2001.

(4) Incorporated by reference to the same numbered exhibit filed with our Form 10-Q for the quarterly period ended March 31, 2001 filed May 8, 2001.

(5) Incorporated by reference to the same numbered exhibit filed with our Registration Statement on Form 8-A (000-30361) filed May 14, 2001.

(6) Incorporated by reference to the same numbered exhibit filed with our Form 10-Q for the quarterly period ended June 30, 2001 filed August 13, 2001.

(7) Incorporated by reference to the same numbered exhibit filed with our Form 10-Q for the quarterly period ended September 30, 2001 filed November 14, 2001.

(8) Incorporated by reference to the same numbered exhibit filed with our Form 10-Q for the quarterly period ended March 31, 2002 filed May 13, 2002.

(9) Incorporated by reference to the same numbered exhibit filed with Amendment No. 1 to our Registration Statement on Form S-3 (333-111496) filed March 2, 2004.

(b) Reports on Form 8-K

Report on Form 8-K filed on October 16, 2003 for press release dated October 16, 2003 announcing Illumina, Inc.'s financial results for the three and nine months ended September 28, 2003.

Supplemental Information

No Annual Report to stockholders or proxy materials has been sent to stockholders as of the date of this report. The Annual Report to stockholders and proxy material will be furnished to our stockholders subsequent to the filing of this report and we will furnish such material to the SEC at that time.

SIGNATURES

Pursuant to the requirements of the 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, on March 12, 2004.

ILLUMINA, INC.

By: /s/ JAY T. FLATLEY
Jay T. Flatley
President and Chief Executive Officer

March 12, 2004

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENT, that each person whose signature appears below constitutes and appoints Jay T. Flatley and Timothy M. Kish, and each or any one of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

/s/ JAY T. FLATLEY Jay T. Flatley	President and Chief Executive Officer Director (Principal Executive Officer)	March 12, 2004
/s/ TIMOTHY M. KISH Timothy M. Kish	Chief Financial Officer (Principal Financial and Accounting Officer)	March 12, 2004
/s/ JOHN R. STUELPNAGEL John R. Stuelpnagel	Senior Vice President of Operations Director	March 12, 2004
/s/ DANIEL M. BRADBURY Daniel M. Bradbury	Director	March 12, 2004
/s/ R. SCOTT GREER R. Scott Greer	Director	March 12, 2004

/s/ ROBERT T. NELSEN Robert T. Nelsen	Director	March 12, 2004
/s/ WILLIAM H. RASTETTER William H. Rastetter	Director	March 12, 2004
/s/ DAVID R. WALT David R. Walt	Director	March 12, 2004

(This page intentionally left blank)

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

The Board of Directors and Stockholders
Illumina, Inc.

We have audited the accompanying consolidated balance sheets of Illumina, Inc. as of December 28, 2003 and December 29, 2002, and the related consolidated statements of operations, stockholders' equity, and cash flows for the years ended December 28, 2003, December 29, 2002 and December 30, 2001. Our audits also include 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 and schedule 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 Illumina, Inc. at December 28, 2003 and December 29, 2002, and the results of its operations and its cash flows for the years ended December 28, 2003, December 29, 2002 and December 30, 2001, 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 consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

/s/ ERNST & YOUNG LLP

San Diego, California
January 23, 2004

ILLUMINA, INC.

CONSOLIDATED BALANCE SHEETS

	December 28, 2003	December 29, 2002
	(In thousands, except share amounts)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 12,465	$ 2,037
Investments, available for sale	20,317	51,727
Restricted cash and investments	100	12,530
Accounts receivable, net	4,549	3,253
Interest receivable	249	478
Inventory, net	2,022	2,299
Prepaid expenses and other current assets	716	495
Total current assets	40,418	72,819
Property and equipment, net	45,777	48,279
Long-term restricted investments	12,191	—
Intangible and other assets, net	848	808
Total assets	$ 99,234	$121,906
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 2,030	$ 1,770
Accrued liabilities	5,540	3,798
Accrued litigation judgment	—	8,052
Current portion of long-term debt	366	340
Current portion of equipment financing	253	337
Total current liabilities	8,189	14,297
Long-term debt, less current portion	24,999	25,367
Noncurrent portion of equipment financing	—	253
Advance payment from former collaborator (see note 6)	10,000	10,000
Litigation judgment	8,658	—
Other long term liabilities	—	245
Commitments		
Stockholders' equity:		
Common stock, $.01 par value, 120,000,000 shares authorized, 32,886,693 shares issued and outstanding at December 28, 2003, 32,500,222 shares issued and outstanding at December 29, 2002	329	325
Additional paid-in capital	165,314	164,483
Deferred compensation	(1,103)	(3,617)
Accumulated other comprehensive income	335	977
Accumulated deficit	(117,487)	(90,424)
Total stockholders' equity	47,388	71,744
Total liabilities and stockholders' equity	$ 99,234	$121,906

See accompanying notes.

ILLUMINA, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 28, 2003	Year Ended December 29, 2002	Year Ended December 30, 2001
	(In thousands except per share amounts)		
Revenue			
Product revenue	$ 18,378	$ 4,103	$ 897
Service revenue	6,496	3,305	99
Research revenue	3,161	2,632	1,490
Total revenue	28,035	10,040	2,486
Costs and expenses:			
Cost of product and service revenue	10,037	3,536	557
Research and development	22,511	26,848	20,735
Selling, general and administrative	18,899	9,099	5,663
Amortization of deferred compensation and other stock-based compensation charges	2,454	4,360	5,850
Litigation judgment	756	8,052	—
Total costs and expenses	54,657	51,895	32,805
Loss from operations	(26,622)	(41,855)	(30,319)
Interest income	1,821	3,805	6,198
Interest expense	(2,262)	(2,281)	(702)
Net loss	$(27,063)	$(40,331)	$(24,823)
Net loss per share, basic and diluted	$ (0.85)	$ (1.31)	$ (0.83)
Shares used in calculating net loss per share, basic and diluted	31,925	30,890	29,748
The composition of stock-based compensation is as follows:			
Research and development	$ 1,289	$ 2,399	$ 3,114
Selling, general and administrative	1,165	1,961	2,736
	$ 2,454	$ 4,360	$ 5,850

See accompanying notes.

ILLUMINA, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY

	Common stock		Additional Paid-in Capital	Deferred Compensation	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount					
	(In thousands)						
Balance at December 31, 2000	31,965	$320	$163,079	$(14,029)	$ —	$ (25,270)	$124,100
Issuance of common stock for cash, net of repurchased shares	269	2	913	—	—	—	915
Amortization of deferred compensation	—	—	—	5,850	—	—	5,850
Reversal of deferred compensation related to unvested stock options and restricted stock of terminated employees	—	—	(96)	96	—	—	—
Comprehensive loss:							
Unrealized gain on investments	—	—	—	—	749	—	749
Net loss	—	—	—	—	—	(24,823)	(24,823)
Comprehensive loss	—	—	—	—	—	—	(24,074)
Balance at December 30, 2001	32,234	322	163,896	(8,083)	749	(50,093)	106,791
Issuance of common stock for cash, net of repurchased shares	266	3	693	—	—	—	696
Amortization of deferred compensation	—	—	—	4,360	—	—	4,360
Reversal of deferred compensation related to unvested stock options and restricted stock of terminated employees	—	—	(106)	106	—	—	—
Comprehensive loss:							
Unrealized gain on investments	—	—	—	—	228	—	228
Net loss	—	—	—	—	—	(40,331)	(40,331)
Comprehensive loss	—	—	—	—	—	—	(40,103)
Balance at December 29, 2002	32,500	325	164,483	(3,617)	977	(90,424)	71,744
Issuance of common stock for cash	408	4	899	—	—	—	903
Repurchase of restricted common stock	(21)	—	(8)	—	—	—	(8)
Amortization of deferred compensation	—	—	12	2,442	—	—	2,454
Reversal of deferred compensation related to unvested stock options and restricted stock of terminated employees	—	—	(72)	72	—	—	—
Comprehensive loss:							
Unrealized loss on investments	—	—	—	—	(702)	—	(702)
Foreign currency translation adjustment	—	—	—	—	60	—	60
Net loss	—	—	—	—	—	(27,063)	(27,063)
Comprehensive loss	—	—	—	—	—	—	(27,705)
Balance at December 28, 2003	32,887	$329	$165,314	$ (1,103)	$ 335	$(117,487)	$ 47,388

ILLUMINA, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 28, 2003	Year Ended December 29, 2002	Year Ended December 30, 2001
		(In thousands)	
Cash flows from operating activities			
Net loss	$(27,063)	$(40,331)	$(24,823)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	4,545	4,531	1,474
Loss on disposal of property and equipment	175	—	—
Amortization of premium on investments	432	609	439
Amortization of deferred compensation and other stock-based compensation charges	2,454	4,360	5,850
Changes in operating assets and liabilities:			
Accounts receivable	(1,296)	(2,878)	(119)
Interest receivable	229	413	(215)
Inventory	277	(1,328)	(900)
Prepaid expenses and other current assets	(221)	(258)	(39)
Advance payment from former collaborator	—	—	5,000
Other assets	(151)	211	166
Accounts payable	260	(205)	1,248
Accrued liabilities	1,742	1,262	718
Accrued litigation judgment	606	8,052	—
Other long term liabilities	(245)	(31)	276
Net cash used in operating activities	(18,256)	(25,593)	(10,925)
Cash flows from investing activities			
Purchase of investment securities	(1,940)	(116,568)	(166,762)
Sales and maturities of investment securities	32,456	141,551	80,068
Purchase of property and equipment	(2,032)	(26,830)	(14,972)
Acquisition of intangible assets	(16)	(794)	—
Net cash provided by (used in) investing activities	28,468	(2,641)	(101,666)
Cash flows from financing activities			
Proceeds from long-term debt	—	26,000	—
Payments on long-term debt	(342)	(293)	—
Payments of equipment financing	(337)	(297)	(261)
Proceeds from issuance of common stock, net of repurchased shares	895	696	915
Net cash provided by financing activities	216	26,106	654
Net increase (decrease) in cash and cash equivalents	10,428	(2,128)	(111,937)
Cash and cash equivalents at beginning of the year	2,037	4,165	116,102
Cash and cash equivalents at end of the year	$ 12,465	$ 2,037	$ 4,165
Supplemental disclosures of cash flow information:			
Cash paid during the year for interest	$ 2,222	$ 2,263	$ 133

See accompanying notes.

1. Organization and Summary of Significant Accounting Policies

Organization and Business

Illumina, Inc. (the ''Company'') was incorporated on April 28, 1998. The Company is developing next-generation tools that will permit the large-scale analysis of genetic variation and function. The information provided by these analyses will help to enable the development of personalized medicine, a key goal of genomics. The Company believes its proprietary BeadArray™ technology will provide the throughput, cost effectiveness and flexibility necessary to enable researchers in the life sciences and pharmaceutical industries to perform the billions of tests necessary to extract medically valuable information from advances in genomics. This information is expected to correlate genetic variation and gene function with particular disease states, enhancing drug discovery, allowing diseases to be detected earlier and more specifically and permitting better choices of drugs for individual patients.

Basis of Presentation

The consolidated financial statements of the Company have been prepared in conformity with accounting principles generally accepted in the United States of America and include the accounts of the Company and its wholly-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires that management make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenue and expenses incurred during the reporting period. Actual results could differ from those estimates

Certain Risks and Uncertainties

As further discussed in Note 6, Applied Biosystems sent a notification to the Company alleging that the Company had breached the joint development agreement entered into in November 1999 and seeking to compel arbitration pursuant to that agreement. This notification alleged that the Company's production-scale genotyping products and services are collaboration products developed under the joint development agreement, and that the Company's commercial activities with respect to its genotyping products and services are unlawful, unfair or fraudulent. Among other relief, Applied Biosystems is seeking compensatory damages of $30 million, disgorgement of all revenues received from sales of these products and services and a prohibition of future sales of these products or services. The Company has been directed to enter into a binding arbitration with Applied Biosystems to resolve the dispute, which could be completed as early as September 2004. This arbitration could result in a range of potential outcomes, based solely on the judgment and discretion of the arbitrator, including (1) the award of all damages and injunctive relief sought by Applied Biosystems; (2) the award of all damages and relief sought by the Company; or (3) a partial award of damages and/or injunctive relief to either party. The Company has not accrued for any potential losses in this case because it believes that an adverse determination is not probable, and potential losses cannot be reasonably estimated. In addition, the Company's financial statements include a $10 million advance payment from Applied Biosystems that would have been deducted from the profits otherwise payable to the Company from Applied Biosystems had the collaboration been successful and which could offset the impact on the Company's consolidated results of operations of an adverse arbitration determination up to that amount. However, any unfavorable arbitration determination, and in particular any significant cash amounts required to be paid by the Company or prohibition of the sale of its products or services,

could result in a material adverse effect on the Company's business, financial condition and results of operations.

Cash and Cash Equivalents

Cash and cash equivalents are comprised of highly liquid investments with a remaining maturity of less than three months from the date of purchase.

Investments

The Company applies Statement of Financial Accounting Standards (''SFAS'') No. 115, *Accounting for Certain Investments in Debt and Equity Securities,* to its investments. Under SFAS No. 115, the Company classifies its investments as ''Available-for-Sale'' and records such assets at estimated fair value in the balance sheet, with unrealized gains and losses, if any, reported in stockholders' equity. The Company invests its excess cash balances in marketable debt securities, primarily government securities and corporate bonds and notes, with strong credit ratings. The Company limits the amount of investment exposure as to institutions, maturity and investment type. The cost of securities sold is determined based on the specific identification method. Gross realized gains totaled $342,693 and $810,201 for the years ended December 28, 2003 and December 29, 2002, respectively. Gross realized losses totaled $141 and $27,467 for the years ended December 28, 2003 and December 29, 2002, respectively.

Restricted Cash and Investments

At December 28, 2003, restricted cash and investments consist of $100,000 in a money market fund for a bond deposit with the San Diego Superior Court related to the Applied Biosystems litigation (see note 6). At December 29, 2002, restricted cash and investments also included securities that are used as collateral against a letter of credit that have since been classified as long term.

Long-term restricted investments consist of corporate debt securities that are used as collateral against a letter of credit (see note 7).

Fair Value of Financial Instruments

Financial instruments, including cash and cash equivalents, investments, accounts receivable, accounts payable, and accrued liabilities are carried at cost, which management believes approximates fair value.

Collectibility of Accounts Receivable

We evaluate the collectibility of our trade and financing receivables based on a combination of factors. We regularly analyze our customer accounts, and, when we become aware of a specific customer's inability to meet its financial obligations to us, we record a specific reserve for bad debt to reduce the related receivable to the amount we reasonably believe is collectible. We also record reserves for bad debt for all other customers based on historical experience. We re-evaluate such reserves on a regular basis and adjust our reserves as needed.

Inventories

Inventories are stated at the lower of standard cost (which approximates actual cost) or market. Inventory includes raw materials and finished goods that may be used in the research and development process and such items are expensed as consumed.

Property and Equipment

Property and equipment are stated at cost, subject to review of impairment, and depreciated over the estimated useful lives of the assets (generally three to seven years for equipment and five to forty years for buildings) using the straight-line method. Amortization of leasehold improvements is computed over the shorter of the lease term or the estimated useful life of the related assets.

License Agreements

Intangible assets consist of three license agreements. In accordance with Accounting Principles Board (''APB'') Opinion No. 17, *Accounting for Intangible Assets,* license agreements are recorded at cost. The rights related to one of the license agreements are amortized over its estimated useful life (five years) and the rights related to the other two agreements are amortized based on sales of related product and are expected to be fully amortized by the end of fiscal 2005. The cost of these license agreements was $809,450 and the Company has amortized $193,333 through December 28, 2003. Amortization expense for the years ending December 28, 2003 and December 29, 2002 was $185,000 and $8,333, respectively. The Company recorded no amortization expense related to these license agreements in the year ended December 30, 2001.

Long-Lived Assets

In accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets,* if indicators of impairment exist, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If impairment is indicated, the Company measures the future discounted cash flows associated with the use of the asset and adjusts the value of the asset accordingly. While the Company's current and historical operating and cash flow losses are indicators of impairment, the Company believes the future cash flows to be received from the long-lived assets recorded at December 28, 2003 will exceed the assets' carrying value, and accordingly the Company has not recognized any impairment losses through December 28, 2003.

Reserve for Product Warranties

The Company generally provides a one year warranty on genotyping and gene expression systems. At the time revenue is recognized, the Company establishes an accrual for estimated warranty expenses associated with system sales. This expense is recorded as a component of cost of revenue.

Revenue Recognition

The Company records revenue in accordance with the guidelines established by SEC Staff Accounting Bulletin No. 101 (''SAB 101''). Under SAB 101, revenue cannot be recorded until all the following criteria are met: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the seller's price to the buyer is fixed or determinable; and collectibility is reasonably assured. Product revenue consists of sales of oligonucleotides, array matrices, assay reagents, genotyping systems and gene expression systems. Service revenue consists of revenue received for performing SNP genotyping services. Revenue for product sales is recognized generally upon shipment and transfer of title to the customer, provided no significant obligations remain and collection of the receivables is reasonably assured. BeadLab genotyping system revenue is recognized when earned, which is generally upon shipment, installation, training and fulfillment of contractually defined acceptance criteria. Reserves are provided for anticipated product warranty expenses at the time the associated revenue is recognized. Revenue for genotyping services is recognized generally at the time the genotyping analysis data is delivered to the customer. The Company has been awarded

$9.1 million from the National Institutes of Health to perform genotyping services in connection with the International HapMap Project. A portion of the revenue from this project is earned at the time the related costs are incurred while the remainder of the revenue is earned upon the delivery of genotyping data. Research revenue consists of amounts earned under research agreements with government grants, which is recognized in the period during which the related costs are incurred. All revenues are recognized net of applicable allowances for returns or discounts.

The Company received $10 million of non-refundable research funding from Applied Biosystems in connection with a licensing and development contract entered into in 1999. This amount was originally recorded as deferred revenue in accordance with the provisions of SAB 101 and would have been recognized as revenue at a contractually defined rate of 25% of the defined operating profit earned from sales of the products covered by the collaboration agreement, had such sales occurred. At present, the Company does not believe a collaboration product will be commercialized under the partnership agreement, and there are legal proceedings between the parties as more fully described in Note 6. The $10 million of research funding has been reclassified to an advance payment from former collaborator until the legal proceedings have been resolved.

Shipping and Handling Expenses

Shipping and handling expenses are included in cost of product sales and totaled approximately $143,000, $50,000 and $9,000 for the years ended December 28, 2003, December 29, 2002 and December 30, 2001, respectively.

Research and Development

Expenditures relating to research and development, including costs related to patent prosecution, are expensed in the period incurred.

Software Development Costs

The Company applies Statement of Financial Accounting Standards No. 86, *Accounting for the Costs of Computer Software to be Sold, Leased or Otherwise Marketed,* to capitalize costs related to marketed software. To date, the Company has only marketed software that is an incidental component to its SNP genotyping and gene expression systems. Accordingly, the Company capitalizes software costs that are incurred after the later of 1) the establishment of technological feasibility of the software or 2) the completion of all research and development activities for the other components of the product. Through December 28, 2003, the period between achieving either of these milestones and the general release date of the products has been very brief and production costs thereafter were not significant. Accordingly, the Company has not capitalized any qualifying software development costs in the accompanying consolidated financial statements. The costs of developing routine enhancements are expensed as research and development costs as incurred because of the short time between the determination of technological feasibility and the date of general release of the related products.

The Company applies Statement of Position (''SOP'') No. 98-1, *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use.* For the years ended 2003 and 2002, the Company capitalized approximately $94,000 and $833,000, respectively, in costs incurred to acquire and develop software associated with the implementation of its Enterprise Resource Planning and Laboratory Information Management systems. These costs are amortized over the estimated useful life of the software of seven years, beginning when the software is ready for its intended use.

Advertising Costs

The Company expenses advertising costs as incurred. Advertising costs were approximately $440,000 for 2003, $267,000 for 2002 and $57,000 for 2001.

Income Taxes

A deferred income tax asset or liability is computed for the expected future impact of differences between the financial reporting and tax bases of assets and liabilities, as well as the expected future tax benefit to be derived from tax loss and credit carryforwards. Deferred income tax expense is generally the net change during the year in the deferred income tax asset or liability. Valuation allowances are established when realizability of deferred tax assets is uncertain. The effect of tax rate changes is reflected in tax expense during the period in which such changes are enacted.

Foreign Currency Translation

The functional currencies of the Company's wholly owned subsidiaries are their respective local currencies. Accordingly, all balance sheet accounts of these operations are translated to U.S. dollars using the exchange rates in effect at the balance sheet date, and revenues and expenses are translated using the average exchange rates in effect during the period. The gains and losses from foreign currency translation of these subsidiaries' financial statements are recorded directly as a separate component of stockholders' equity under the caption ''Accumulated other comprehensive income.''

Stock-Based Compensation

At December 28, 2003, the Company has three stock-based employee and non-employee director compensation plans, which are described more fully in Note 5. As permitted by SFAS No. 123, *Accounting for Stock-Based Compensation,* the Company accounts for common stock options granted, and restricted stock sold, to employees, founders and directors using the intrinsic value method and, thus, recognizes no compensation expense for options granted, or restricted stock sold, with exercise prices equal to or greater than the fair value of the Company's common stock on the date of the grant. The Company has recorded deferred stock compensation related to certain stock options, and restricted stock, which were granted prior to the Company's initial public offering with exercise prices below estimated fair value (see Note 5), which is being amortized on an accelerated amortization methodology in accordance with Financial Accounting Standards Board Interpretation Number (''FIN'') 28.

Pro forma information regarding net loss is required by SFAS No. 123 and has been determined as if the Company had accounted for its employee stock options and employee stock purchases under the fair value method of that statement. The fair value for these options was estimated at the dates of grant using the fair value option pricing model (Black Scholes) with the following weighted-average assumptions for 2003, 2002 and 2001:

	Year Ended December 28, 2003	Year Ended December 29, 2002	Year Ended December 30, 2001
Weighted average risk-free interest rate	3.03%	3.73%	4.65%
Expected dividend yield	0%	0%	0%
Weighted average volatility	103%	104%	119%
Estimated life (in years)	5	5	5
Weighted average fair value of options granted	$3.31	$4.39	$7.51

For purposes of pro forma disclosures, the estimated fair value of the options is amortized to expense over the vesting period. The Company's pro forma information is as follows (in thousands except per share amounts):

	Year Ended December 28, 2003	Year Ended December 29, 2002	Year Ended December 30, 2001
Net loss as reported	$(27,063)	$(40,331)	$(24,823)
Add: Stock-based compensation expense recorded	2,454	4,360	5,850
Less: Assumed stock compensation expense	(8,576)	(8,479)	(7,059)
Pro forma net loss	$(33,185)	$(44,450)	$(26,032)
Basic and Diluted net loss per share:			
As reported	$ (0.85)	$ (1.31)	$ (0.83)
Pro forma	$ (1.04)	$ (1.44)	$ (0.88)

The pro forma effect on net loss presented is not likely to be representative of the pro forma effects on reported net income or loss in future years because these amounts reflect less than five years of vesting.

Deferred compensation for options granted, and restricted stock sold, to consultants has been determined in accordance with SFAS No. 123 and Emerging Issues Task Force 96-18 as the fair value of the consideration received or the fair value of the equity instruments issued, whichever is more reliably measured. Deferred charges for options granted, and restricted stock sold, to consultants are periodically remeasured as the underlying options vest.

Comprehensive Loss

In accordance with SFAS No. 130, *Reporting Comprehensive Income*, the Company has disclosed comprehensive loss as a component of stockholders' equity.

Net Loss per Share

Basic and diluted net loss per common share are presented in conformity with SFAS No. 128, *Earnings per Share*, for all periods presented. In accordance with SFAS No. 128, basic and net loss per share is computed using the weighted-average number of shares of common stock outstanding during the period, less shares subject to repurchase. Diluted net loss per share is typically computed using the weighted average number of common and dilutive common equivalent shares from stock options using the treasury stock method. However, for all periods presented, diluted net loss per share is the same as basic net loss per share because the Company reported a net loss and therefore the inclusion

of weighted average shares of common stock issuable upon the exercise of stock options would be antidilutive.

	Year Ended December 28, 2003	Year Ended December 29, 2002	Year Ended December 30, 2001
		(In thousands)	
Weighted-average shares outstanding	32,733	32,390	32,136
Less: Weighted-average shares of common stock subject to repurchase	(808)	(1,500)	(2,388)
Weighted-average shares used in computing net loss per share, basic and diluted	31,925	30,890	29,748

The total number of shares excluded from the calculation of diluted net loss per share, prior to application of the treasury stock method for options and warrants, was 5,809,649, 5,556,455 and 5,352,950 for the years ended December 28, 2003, December 29, 2002 and December 30, 2001, respectively.

Fiscal Year

The Company's fiscal year is 52 or 53 weeks ending the Sunday closest to December 31.

Effect of New Accounting Standards

In November 2002, the FASB Emerging Issues Task Force (''EITF'') issued its consensus concerning *Revenue Arrangements with Multiple Deliverables* (''EITF 00-21''). EITF 00-21 addresses how to determine whether a revenue arrangement involving multiple deliverables should be divided into separate units of accounting, and, if separation is appropriate, how the arrangement consideration should be measured and allocated to the identified accounting units. EITF 00-21 is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The adoption of EITF 00-21 did not have a material impact on the Company's consolidated financial statements.

In November 2002, the FASB issued FIN 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others.* FIN 45 requires a liability to be recorded in the guarantor's balance sheet upon issuance of a guarantee. In addition, FIN 45 requires disclosures about the guarantees that an entity has issued, including a reconciliation of changes in the entity's product warranty liabilities. The initial recognition and initial measurement provisions of FIN 45 are applicable on a prospective basis to guarantees issued or modified after December 31, 2002. The disclosure requirements of FIN 45 are effective for financial statements ending after December 15, 2002. The adoption of FIN 45 did not have a material impact on the Company's consolidated financial statements.

In April 2003, the FASB issued SFAS No. 149, *Amendment of Statement 133 on Derivative Instruments and Hedging Activities.* SFAS No. 149 amends and clarifies accounting for derivative instruments, including certain derivative instruments embedded in other contracts, and for hedging activities under SFAS No. 133. SFAS No. 149 clarifies under what circumstances a contract with an initial net investment meets the characteristic of a derivative as discussed in SFAS No. 133 and when a derivative contains a financing component that warrants special reporting in the statement of cash flows. SFAS No. 149 is effective for contracts entered into or modified after June 30, 2003, for hedging relationships designated after June 30, 2003, and to certain pre-existing contracts. The adoption of SFAS No. 149 did not have a material impact on the Company's consolidated financial statements.

In May 2003, the FASB issued SFAS No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity.* SFAS No. 150 affects the issuer's accounting for three types of freestanding financial instruments; (a) mandatorily redeemable shares which the issuing company is obligated to buy back in exchange for cash or other assets, (b) put options and forward purchase contracts that do or may require the issuer to buy back some of its shares in exchange for cash or other assets, and (c) obligations that can be settled with shares, the monetary value of which is fixed, ties solely or predominantly to a variable such as a market index, or varies inversely with the value of the issuer's shares. SFAS No. 150 also requires disclosures about alternative ways of settling the instruments and the capital structure of entities. SFAS No. 150 is effective for all financial instruments entered into or modified after May 31, 2003 and for all periods beginning after June 15, 2003. The adoption of SFAS 150 did not have a material impact on the Company's consolidated financial statements.

In December 2003, the FASB issued a revision to FASB Interpretation No. 46 (''FIN 46R''), *Consolidation of Variable Interest Entities.* FIN 46R replaces FASB Interpretation No. 46, *Consolidation of Variable Interest Entities,* which was issued in January 2003. FIN 46R requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity's activities or entitled to receive a majority of the entity's residual returns or both. A variable interest entity either (a) does not have equity investors with voting rights or (b) has equity investors that do not provide sufficient financial resources to the entity to support its activities. FIN 46R is effective immediately for all new variable interest entities created or acquired after December 31, 2003. The adoption of FIN 46 is not expected to have a material impact on the Company's consolidated financial statements.

2. Balance Sheet Account Details

Investments, including restricted investments, consist of the following (in thousands):

	December 28, 2003			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Market Value
US Treasury securities	$ 6,340	$253	$ —	$ 6,593
Corporate debt securities	13,480	244	—	13,724
	19,820	497	—	20,317
Long term restricted corporate debt securities	12,413	—	(222)	12,191
Total	$32,233	$497	$(222)	$32,508

	December 29, 2002			
	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Market Value
US Treasury securities	$ 9,359	$ 113	$ —	$ 9,472
Corporate debt securities	41,328	961	(34)	42,255
	50,687	1,074	(34)	51,727
Restricted corporate debt securities	12,493	—	(63)	12,430
Total	$63,180	$1,074	$(97)	$64,157

Investment maturities at December 28, 2003 are as follows:

	Investments	Market Value Long-Term Restricted Investments	Total
Within one year	$ 3,280	$ —	$ 3,280
After one year through five years	14,549	12,191	26,740
After five years through ten years	685	—	685
Mortgage backed securities	1,803	—	1,803
Total	$20,317	$12,191	$32,508

Accounts receivable consist of the following (in thousands):

	December 28, 2003	December 29, 2002
Accounts receivable from product and service sales	$4,388	$3,076
Accounts receivable from government grants	260	263
Other receivables	79	59
	4,727	3,398
Allowance for doubtful accounts	(178)	(145)
Total	$4,549	$3,253

Inventory consists of the following (in thousands):

	December 28, 2003	December 29, 2002
Raw materials	$ 829	$1,552
Work in process	931	407
Finished goods	262	340
Total	$2,022	$2,299

Property and equipment consist of the following (in thousands):

	December 28, 2003	December 29, 2002
Land	$ 10,361	$10,361
Buildings	29,479	29,477
Leasehold improvements	174	—
Laboratory and manufacturing equipment	9,221	8,373
Computer equipment and software	5,130	4,599
Furniture and fixtures	1,966	1,821
	56,331	54,631
Accumulated depreciation and amortization	(10,554)	(6,352)
Total	$ 45,777	$48,279

Accrued liabilities consist of the following (in thousands):

	December 28, 2003	December 29, 2002
Compensation	$2,608	$2,156
Professional fees	1,437	965
Taxes	523	366
Reserve for product warranties	230	—
Other	742	311
Total	$5,540	$3,798

3. Warranties

The Company generally provides a one year warranty on genotyping and gene expression systems. At the time revenue is recognized, the Company establishes an accrual for estimated warranty expenses associated with system sales. This expense is recorded as a component of cost of revenue.

Changes in the Company's warranty liability during the year ended December 28, 2003 are as follows (in thousands):

Balance at December 29, 2002	$ —
Additions charged to cost of revenue	230
Balance at December 28, 2003	$230

4. Commitments and Long-term Debt

Building Loan

In July 2000, the Company entered into a 10-year lease to rent space in two newly constructed buildings that are now occupied by the Company. That lease contained an option to purchase the buildings together with certain adjacent land that has been approved for construction of an additional building. The Company exercised that option and purchased the properties in January 2002 and assumed a $26 million, 10-year mortgage on the property at a fixed interest rate of 8.36%. The Company is required to make monthly payments of $208,974 representing interest and principal through February 2012 at which time a balloon payment of $21.2 million will be due.

At December 28, 2003, annual future minimum payments under the building loan are as follows (in thousands):

2004	$ 2,508
2005	2,508
2006	2,508
2007	2,508
2008	2,508
Thereafter	28,979
Total minimum payments	41,519
Less amount representing interest	(16,154)
Total present value of minimum payments	25,365
Less current portion	(366)
Non-current portion	$ 24,999

The Company leases approximately 19,000 square feet of space to a tenant under a lease expiring in June 2004. Rental income is recorded as an offset to the Company's allocated overhead costs. For the years ended December 28, 2003, December 29, 2002, and December 30, 2001, rental income was $695,282, $679,468 and $108,812, respectively.

Capital Leases

In April 2000, the Company entered into a $3,000,000 loan arrangement to be used at its discretion to finance purchases of capital equipment. The loan is secured by the capital equipment financed. As of December 28, 2003, $1,682,318 remains available under this loan arrangement. Cost and accumulated depreciation of equipment under capital leases at December 28, 2003 is $1,287,789 and $1,060,278, respectively. Depreciation of equipment under capital leases is included in depreciation expense.

At December 28, 2003, annual future minimum rental payments under the Company's capital leases are as follows (in thousands):

2004	$ 263
Total minimum payments	263
Less amount representing interest	(10)
Total present value of minimum payments	253
Less current portion	(253)
Non-current portion	$ 0

Operating Leases

The Company leases office space under non-cancelable operating leases that expire at various times through December 2006. These leases contain renewal options ranging from 2 to 3 years. At

December 28, 2003, annual future minimum payments under these operating leases are as follows (in thousands):

2004	$360
2005	65
2006	37
Total	$462

Rent expense for the years ended December 28, 2003, December 29, 2002 and December 30, 2001 was $238,065, $141,361 and $1,495,395, respectively.

5. Stockholders' Equity

Common stock

As of December 28, 2003, the Company had 32,886,693 shares of common stock outstanding, of which 4,888,500 shares were sold to employees and consultants subject to restricted stock agreements. The restricted common shares vest in accordance with the provisions of the agreements, generally over five years. All unvested shares are subject to repurchase by the Company at the original purchase price. As of December 28, 2003, 579,775 shares of common stock were subject to repurchase.

Warrants

In connection with a lease financing facility in 1998, the Company issued the lessor warrants to purchase 43,183 shares of common stock at $.926 per share. These warrants were exercised in February 2001.

Stock Options

In June 2000, the Company's board of directors and stockholders adopted the 2000 Stock Plan. The 2000 Stock Plan amended and restated the 1998 Incentive Stock Plan and increased the shares reserved for issuance by 4,000,000 shares. In addition, the 2000 Stock Plan provides for an automatic annual increase in the shares reserved for issuance by the lesser of 5% of outstanding shares of the Company's common stock on the last day of the immediately preceding fiscal year, 1,500,000 shares or such lesser amount as determined by the Company's board of directors.

In 1998, the Company adopted the 1998 Incentive Stock Plan (the ''Plan'') and had reserved 5,750,000 shares of common stock for grants under the Plan. The Plan provided for the grant of incentive and nonstatutory stock options, stock bonuses and rights to purchase stock to employees, directors or consultants of the Company. The Plan provided that incentive stock options to be granted only to employees at no less than the fair value of the Company's common stock, as determined by the board of directors at the date of the grant. Options generally vest 20% one year from the date of grant and ratably each month thereafter for a period of 48 months and expire ten years from date of grant. In December 1999, the Company modified the plan to allow for acceleration of vesting in the event of an acquisition or merger.

A summary of the Company's stock option activity from December 31, 2000 through December 28, 2003 follows:

	Options	Weighted-Average Exercise Price
Outstanding at December 31, 2000	1,507,396	$ 8.57
Granted	2,166,100	$ 8.78
Exercised	(163,523)	$ 0.84
Cancelled	(129,177)	$11.26
Outstanding at December 30, 2001	3,380,796	$ 8.97
Granted	1,467,500	$ 5.62
Exercised	(137,727)	$ 0.46
Cancelled	(287,788)	$11.81
Outstanding at December 29, 2002	4,422,781	$ 7.94
Granted	1,241,175	$ 3.31
Exercised	(102,590)	$ 1.25
Cancelled	(331,492)	$ 8.36
Outstanding at December 28, 2003	5,229,874	$ 6.95

At December 28, 2003, options to purchase approximately 1,794,872 shares were exercisable and 5,536,135 shares remain available for future grant.

Following is a further breakdown of the options outstanding as of December 28, 2003:

Range of Exercise Prices	Options Outstanding	Weighted Average Remaining Life in Years	Weighted Average Exercise Price	Options Exercisable	Weighted Average Exercise Price of Options Exercisable
$0.03 - 2.62	514,311	6.45	$ 0.81	293,233	$ 0.36
$2.75 - 2.77	569,500	9.12	$ 2.77	92,495	$ 2.77
$2.91 - 4.09	723,857	9.28	$ 3.74	68,732	$ 3.72
$4.10 - 5.00	612,410	8.29	$ 4.57	213,594	$ 4.68
$5.25 - 5.99	837,000	7.87	$ 5.94	156,395	$ 5.96
$6.00 - 8.30	676,344	7.79	$ 7.28	290,480	$ 7.39
$8.35 - 10.25	637,700	7.53	$ 9.26	296,280	$ 9.29
$10.30 - 16.25	290,500	7.30	$12.50	157,839	$12.67
$18.75 - 22.56	181,500	7.02	$20.52	106,440	$20.51
$30.06 - 45.00	186,752	6.78	$30.47	119,384	$30.49
	5,229,874			1,794,872	

2000 Employee Stock Purchase Plan

In February 2000, the board of directors and stockholders adopted the 2000 Employee Stock Purchase Plan (the ''Purchase Plan''). A total of 1,458,946 shares of the Company's common stock have been reserved for issuance under the Purchase Plan. The Purchase Plan permits eligible employees to purchase common stock at a discount, but only through payroll deductions, during defined offering

periods. The price at which stock is purchased under the Purchase Plan is equal to 85% of the fair market value of the common stock on the first or last day of the offering period, whichever is lower. The initial offering period commenced in July 2000. In addition, the Purchase Plan provides for annual increases of shares available for issuance under the Purchase Plan beginning with fiscal 2001. 304,714, 128,721 and 64,674 shares were issued under the 2000 Employee Stock Purchase Plan during fiscal 2003, 2002 and 2001, respectively.

Deferred Stock Compensation

Since the inception of the Company, in connection with the grant of certain stock options and sales of restricted stock to employees, founders and directors through July 25, 2000, the Company has recorded deferred stock compensation totaling approximately $17.7 million, representing the difference between the exercise or purchase price and the fair value of the Company's common stock as estimated by the Company's management for financial reporting purposes on the date such stock options were granted or restricted common stock was sold. Deferred compensation is included as a reduction of stockholders' equity and is being amortized to expense over the vesting period of the options and restricted stock. During the year ended December 28, 2003, the Company recorded amortization of deferred stock compensation expense of approximately $2.5 million.

Shares Reserved for Future Issuance

At December 28, 2003, the Company has reserved shares of common stock for future issuance as follows (in thousands):

2000 Stock Plan	10,766
2000 Employee Stock Purchase Plan	961
	11,727

Stockholder Rights Plan

On May 3, 2001, the Board of Directors of the Company declared a dividend of one preferred share purchase right (a ''Right'') for each outstanding share of common stock of the Company. The dividend was payable on May 14, 2001 (the ''Record Date'') to the stockholders of record on that date. Each Right entitles the registered holder to purchase from the Company one unit consisting of one-thousandth of a share of its Series A Junior Participating Preferred Stock at a price of $100 per unit. The Rights will be exercisable if a person or group hereafter acquires beneficial ownership of 15% or more of the outstanding common stock of the Company or announces an offer for 15% or more of the outstanding common stock. If a person or group acquires 15% or more of the outstanding common stock of the Company, each Right will entitle its holder to purchase, at the exercise price of the right, a number of shares of common stock having a market value of two times the exercise price of the right. If the Company is acquired in a merger or other business combination transaction after a person acquires 15% or more of the Company's common stock, each Right will entitle its holder to purchase, at the Right's then-current exercise price, a number of common shares of the acquiring company which at the time of such transaction have a market value of two times the exercise price of the right. The Board of Directors will be entitled to redeem the Rights at a price of $0.01 per Right at any time before any such person acquires beneficial ownership of 15% or more of the outstanding common stock. The rights expire on May 14, 2011 unless such date is extended or the rights are earlier redeemed or exchanged by the Company.

6. Collaborative Agreements

Applied Biosystems Group (part of Applera Corporation)

In November 1999, the Company entered into a joint development agreement with Applied Biosystems Group (''Applied Biosystems'') under which the companies would jointly develop a SNP genotyping system that would combine the Company's BeadArray technology with Applied Biosystems' assay chemistry and scanner technology. Under this agreement, the Company was primarily responsible for developing and manufacturing the arrays and Applied Biosystems was primarily responsible for developing and manufacturing the instruments, SNP assay reagents, and software and for marketing the system worldwide. In conjunction with the agreement, Applied Biosystems purchased 1,250,000 shares of Series C convertible preferred stock at $4.00 per share. In addition, Applied Biosystems agreed to provide the Company with non-refundable research and development support of $10 million, all of which was provided by December 2001. Upon commercialization of the system, the Company would have received a share of the operating profits resulting from the sale of all components of these systems. The Company had originally deferred recognition of revenue from the research funding of $10 million provided by Applied Biosystems, and would have recognized such amounts as revenue at a contractually defined rate of 25% of the total profit share the Company earned from the sales of collaboration products, had such sales occurred. As of December 28, 2003 this amount has been reclassified to an advance payment from former collaborator.

In July 2002, Applied Biosystems indicated that the planned mid-2002 launch of this genotyping system would be delayed a second time. This delay was related to Applied Biosystems' inability to optimize and multiplex the SNP assay reagents. The Company does not believe that Applied Biosystems has any intention of continuing to develop a collaboration product with the Company, and Applied Biosystems has recently launched a competing product. As a result of the delay in developing the collaboration product, the Company launched its own production scale genotyping system in July 2002 utilizing the Company's arrays and an independently developed scanner and assay method.

In December 2002, Applied Biosystems filed a complaint, then later in March 2003 amended and refiled a complaint, for a patent infringement suit against the Company in the federal court in Northern California asserting infringement of several patents related to Applied Biosystems' patented assay intended for use in the collaboration. Applied Biosystems seeks a judgment granting it damages for infringement, treble damages alleging that such infringement is willful and a permanent injunction restraining the Company from the alleged infringement. The Company has answered the complaint, asserting various defenses, including that it does not infringe the patents or that the patents are invalid, and asserting counterclaims against Applied Biosystems seeking declaratory judgment relief related to the patents being asserted against it, and seeking damages from Applied Biosystems for its unfair and unlawful conduct which constitutes attempted monopolization in violation of the antitrust laws.

Also in December 2002, Applied Biosystems sent a notification to the Company alleging that the Company had breached the joint development agreement entered into in November 1999 and seeking to compel arbitration pursuant to that agreement. This notification alleged that the Company's production-scale genotyping products and services are collaboration products developed under the joint development agreement, and that the Company's commercial activities with respect to its genotyping products and services are unlawful, unfair or fraudulent. Among other relief, Applied Biosystems is seeking compensatory damages of $30 million, disgorgement of all revenues received from sales of these products and services and a prohibition of future sales of these products or services.

In December 2002, the Company filed a suit alleging breach of contract, breach of the implied covenant of good faith and fair dealing, unfair competition and other allegations against Applied

Biosystems in San Diego Superior Court, and a motion for a temporary restraining order to prevent the arbitration of our joint development agreement sought by Applied Biosystems. In December 2003, the Company notified Applied Biosystems that it terminated the joint development agreement.

In December 2003, after having granted temporary and preliminary injunctions staying the arbitration, the San Diego Superior Court directed Applied Biosystems and the Company to resolve the contract dispute in a binding arbitration procedure. While a definitive schedule has not yet been set, the Company believes that the arbitration process could be completed as early as September 2004. The Company will vigorously defend against the claims alleged by Applied Biosystems but the outcome of an arbitration proceeding is inherently uncertain and the Company cannot be sure that it will prevail. This arbitration could result in a range of potential outcomes, based solely on the judgment and discretion of the arbitrator, including (1) the award of all damages and injunctive relief sought by Applied Biosystems; (2) the award of all damages and relief sought by the Company; or (3) a partial award of damages and/or injunctive relief to either party. The Company has not accrued for any potential losses in this case because it believes that an adverse determination is not probable, and potential losses cannot be reasonably estimated. In addition, the Company's financial statements include a $10 million advance payment from Applied Biosystems that would have been deducted from the profits otherwise payable to the Company from Applied Biosystems had the collaboration been successful and which could offset the impact on the Company's consolidated results of operations of an adverse arbitration determination up to that amount. However, any unfavorable arbitration determination, and in particular any significant cash amounts required to be paid by the Company or prohibition of the sale of its products or services, could result in a material adverse effect on the Company's business, financial condition and results of operations.

The Company is in the early stages of proceedings in the patent case. In February 2004, the federal district court in Northern California ordered that the patent case be stayed pending completion of the arbitration process. The Company intends to vigorously defend against the claims alleged by Applied Biosystems and continue to pursue its counterclaims against Applied Biosystems. However, the Company cannot be sure that it will prevail in these matters. Any unfavorable determination, and in particular any significant cash amounts required to be paid by us or prohibition of the sale of the Company's products or services, could result in a material adverse effect on its business, financial condition and results of operations.

Other Agreements

The Company is the recipient of a grant from the National Institutes of Health covering its participation in the International HapMap Project, which is a $100 million, internationally funded successor project to the Human Genome Project that will help identify a map of genetic variations that may be used to perform disease-related research. The Company could receive up to $9.1 million of funding for this project which covers basic research activities, the development of SNP assays and the genotyping to be performed on those assays. The Company recognized revenue under this grant of $3.7 million in 2003 and, as of the end of 2003, had approximately $5.4 million of funding remaining related to this project which is expected to be received in 2004, depending on the actual amount of work that is performed by the Company.

7. Litigation Judgment

In June 2002, the Company recorded a $7.7 million charge to cover total damages and estimated expenses awarded by a jury related to a termination-of-employment lawsuit. The Company believes that the termination was lawful in all respects and that the verdict was unsupported by evidence presented at the trial. The Company plans to vigorously defend its position on appeal. A notice of

appeal in this case was filed on October 10, 2002, and the appeal process is ongoing. During the appeal process, the court requires the Company to incur interest charges on the judgment amount at statutory rates until the case is resolved. For the years ended December 28, 2003 and December 29, 2002, the Company recorded litigation expense of $756,000 and $352,000, respectively, for interest.

As a result of the Company's decision to appeal the ruling, the Company filed a surety bond with the court equal to 1.5 times the judgment amount or approximately $11.3 million. Under the terms of the bond, the Company is required to maintain a letter of credit for 90% of the bond amount to secure the bond. Further, the Company was required to deposit approximately $12.5 million of marketable securities as collateral for the letter of credit and accordingly, these funds will be restricted from use for general corporate purposes until the appeal process is completed. If a judgment is due, the Company expects payment will occur within 12 to 18 months. In 2003, the Company reclassified the restricted investments to long term on the balance sheet along with the accrued litigation judgment.

8. Income Taxes

At December 28, 2003, the Company has federal and state tax net operating loss carryforwards of approximately $69,475,000 and $27,008,000, respectively. The federal and state tax loss carryforwards will begin expiring in 2018 and 2006 respectively, unless previously utilized. The Company also has federal and state research and development tax credit carryforwards of approximately $3,116,000 and $2,586,000 respectively, which will begin to expire in 2018, unless previously utilized.

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

Significant components of the Company's deferred tax assets as of December 28, 2003 and December 29, 2002 are shown below (in thousands). A valuation allowance has been established as of December 28, 2003 and December 29, 2002 to offset the net deferred tax assets as realization of such assets has not met the ''more likely than not'' threshold required under FAS 109.

	December 28, 2003	December 29, 2002
Deferred tax assets:		
Net operating loss carryforwards	$ 25,869	$ 21,222
Research and development and other credit carryforwards	5,111	3,873
Advance payment from former collaborator	4,074	4,078
Capitalized research and development	1,348	—
Other	7,032	2,131
Total deferred tax assets	43,434	31,304
Valuation allowance for deferred tax assets	(43,434)	(31,304)
Net deferred taxes	$ —	$ —

Reconciliation of the statutory federal income tax to the Company's effective tax:

	Year Ended		
	December 28, 2003	December 29, 2002	December 30, 2001
Tax at federal statutory rate	$(9,472)	$(14,116)	$(8,688)
State, net of federal benefit	(1,434)	(2,115)	(1,138)
Research and development credits	(1,374)	(1,239)	(1,368)
Change in valuation allowance	11,893	14,241	8,604
Permanent differences	738	1,234	1,757
Other	(351)	1,995	833
Provision for income taxes	$ —	$ —	$ —

9. Retirement Plan

The Company has a 401(k) savings plan covering substantially all of its employees. Company contributions to the plan are discretionary and no such contributions were made during the years ended December 28, 2003, December 29, 2002 and December 30, 2001.

10. Segment Information and Geographic Data

The Company has determined that, in accordance with SFAS No. 131, *Disclosures about Segments of an Enterprise and Related Information* it operates in one segment as it only reports operating results on an aggregate basis to chief operating decision makers of the Company. The Company had sales by region as follows for the years ended December 28, 2003, December 29, 2002 and December 30, 2001 (in thousands):

	December 28, 2003	December 29, 2002	December 30, 2001
United States	$13,666	$ 8,731	$2,486
Europe	5,909	1,047	—
Asia	5,557	246	—
Other	2,903	16	—
Total	$28,035	$10,040	$2,486

Exclusive of revenue recorded from the National Institutes of Health, the Company had one customer that provided approximately 18% of total revenue in the year ended December 28, 2003, another customer that contributed approximately 22% of total revenue in the year ended December 29, 2002 and no customers that contributed 10% or more of revenue in the year ended December 30, 2001. Revenue from the National Institutes of Health accounted for 21%, 19% and 48% of total revenue for the years ended December 28, 2003, December 29, 2002 and December 30, 2001, respectively.

11. Quarterly Financial Information (unaudited)

The following financial information reflects all normal recurring adjustments, except as noted below, which are, in the opinion of management, necessary for a fair statement of the results of interim

periods. Summarized quarterly data for fiscal 2003 and 2002 are as follows (in thousands except per share data):

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2003:				
Total revenues	$ 4,276	$ 4,769	$ 8,249	$10,741
Total cost of revenue	1,910	2,026	2,681	3,420
Net loss	(8,960)	(8,592)	(5,511)	(4,000)
Historical net loss per share, basic and diluted	(0.28)	(0.27)	(0.17)	(0.12)
2002:				
Total revenues	$ 1,269	$ 1,900	$ 2,985	$ 3,886
Total cost of revenue	339	596	965	1,636
Net loss	(8,667)	(16,447)	(7,602)	(7,615)
Historical net loss per share, basic and diluted	(0.28)	(0.54)	(0.24)	(0.24)

In the second quarter of 2002 the Company recorded a $7.7 million charge to cover total damages and estimated expenses related to a termination-of-employment lawsuit.

SCHEDULE II — VALUATION AND QUALIFYING ACCOUNTS AND RESERVES FOR THE THREE YEARS ENDED DECEMBER 28, 2003

	Allowance for Doubtful Accounts	Reserve for Obsolete and Excess Inventory	Reserve for Product Warranty
		(Thousands)	
Balance at December 31, 2000	$ —	$ —	$ —
Charged to expense	32	—	—
Balance at December 30, 2001	32	—	—
Charged to expense	115	73	—
Utilizations	(2)	—	—
Balance at December 29, 2002	145	73	—
Charged to expense	118	466	230
Utilizations	(85)	(73)	—
Balance at December 28, 2003	$178	$466	$230

Corporate Directory

BOARD OF DIRECTORS

Jay T. Flatley
President and Chief Executive Officer
Illumina

John R. Stuelpnagel, D.V.M.
Senior Vice President of Operations
Illumina

R. Scott Greer
Chairman of the Board
Abgenix, Inc.

Robert T. Nelsen
Senior Partner
ARCH Venture Partners

Daniel Bradbury
Chief Operating Officer
Amylin Pharmaceuticals

William H. Rastetter, Ph.D.
Executive Chairman
Biogen Idec

David R. Walt, Ph.D.
Robinson Professor of Chemistry
Tufts University

EXECUTIVE OFFICERS

Jay T. Flatley
President and Chief Executive Officer

John R. Stuelpnagel, D.V.M.
Senior Vice President of Operations

David L. Barker, Ph.D.
Vice President and Chief Scientific Officer

Paulette D. Cabral
Vice President of Human Resources

David C. Douglas
Vice President of Manufacturing

Noemi C. Espinosa
Vice President of Intellectual Property

Robert C. Kain
Vice President of Engineering

Timothy M. Kish
Vice President and Chief Financial Officer

Arnold Oliphant, Ph.D.
Vice President of Scientific Operations

Tristan Orpin
Vice President of Worldwide Sales

Corporate Information

CORPORATE HEADQUARTERS
9885 Towne Centre Drive
San Diego, CA 92121
+1 858.202.4500
www.illumina.com

INDEPENDENT ACCOUNTANTS
Ernst & Young LLP
San Diego, CA 92101

TRANSFER AGENT
EquiServe Trust Company N.A.
150 Royall Street
Canton, MA 02121
+1 781.575.3400
www.equiserve.com

LEGAL COUNSEL
Heller Ehrman White & McAuliffe LLP
Menlo Park, CA 94025

FORM 10-K
Included with this report is a copy of the Company's Form 10-K filed with the Securities and Exchange Commission. Additional copies are available by contacting Illumina's Investor Relations Department.

www.illumina.com
investor@illumina.com
+1 858.202.4750

ANNUAL MEETING
The Company's Annual Meeting of Stockholders will be held at the Company's corporate headquarters at 10 a.m. on May 20, 2004.

SELECTED COMMON STOCK DATA
The Company's common stock, par value $.01, has been traded under the symbol ILMN since July 28, 2000 on the National Association of Securities Dealers Automated Quotation (Nasdaq) National Market System.

As of March 26, 2004, there were approximately 153 record holders of the Company's common stock. The Company has not paid any cash dividends since its inception and does not anticipate paying any cash dividends in the foreseeable future.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995: this report may contain forward-looking statements that involve risks and uncertainties. Among the important factors which could cause actual results to differ materially from those in the forward-looking statements are Illumina's ability to fully develop its BeadArray technologies, the costs and outcome of Illumina's litigation with Applied Biosystems, the Company's ability to develop and deploy new genomics applications for its platform technology, the ability to manufacture Sentrix arrays and other consumables in a manner sufficient to compel market trial and purchase, and other factors detailed in the Company's filings with the Securities and Exchange Commission including its recent filings on Forms 10-K and 10-Q or in information disclosed in public conference calls, the date and time of which are released beforehand. Illumina disclaims any intent or obligation to update these forward-looking statements beyond the date of this report.

Illumina, Inc.
9885 Towne Centre Drive
San Diego, CA 92121
www.illumina.com