ILLUMINA INC
Form S-3/A
March 29, 2004

Table of Contents

**As filed with the Securities and Exchange Commission on March 29, 2004**

**Registration No. 333-111496**

# SECURITIES AND EXCHANGE COMMISSION

**Washington, D.C. 20549**

**Amendment No. 2 to**

# Form S-3

**REGISTRATION STATEMENT**
**UNDER**
**THE SECURITIES ACT OF 1933**

# 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**
**(858) 202-4500**
*(Address, including zip code, and telephone number, including area code, of Registrant s principal executive offices)*

**Jay T. Flatley**
**Chief Executive Officer and President**
**Illumina, Inc.**
**9885 Towne Centre Drive, San Diego, California 92121**
**(858) 202-4500**
*(Name, address, including zip code, and telephone number, including area code, of agent for service)*

***Copy to:***
**Edward Y. Kim**
**Heller Ehrman White & McAuliffe LLP**
**2775 Sand Hill Road**
**Menlo Park, California 94025**
**Telephone: (650) 854-4488**
**Facsimile: (650) 324-0638**

**Approximate date of commencement of proposed sale to the public:** From time to time or at one time after the effective date of the registration statement as the registrant shall determine.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. þ

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act of 1933, please check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act of 1933, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. o

**The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

Table of Contents

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities, and we are not soliciting offers to buy these securities, in any state where the offer or sale is not permitted.

**SUBJECT TO COMPLETION, DATED MARCH 29, 2004**

**PRELIMINARY PROSPECTUS**

# Illumina, Inc.

## $65,000,000

## Common Stock

From time to time, we may sell up to $65,000,000 in the aggregate of common stock. We will provide the specific terms of this offering in one or more supplements to this prospectus. You should read this prospectus and any prospectus supplement carefully before you invest. **This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.**

Our common stock currently trades on The Nasdaq National Market under the symbol ILMN. On March 26, 2004, the last reported sales price of our common stock was $6.91 per share.

**Investing in our securities involves a high degree of risk. See Risk Factors beginning on page 2.**

Shares offered by this prospectus may be offered for sale from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time; at market prices prevailing at the times of sale; at prices related to such prevailing market prices; or at negotiated prices. We will provide in the applicable prospectus supplement the specific price to the public, the underwriter s discounts and commissions, if any, and the net proceeds we will receive. For additional information on the determination of the offering price, you should refer to the section entitled Plan of Distribution.

The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers. For additional information on the methods of sale, you should refer to the section entitled Plan of Distribution. If any underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable commissions or discounts will be set forth in a prospectus supplement.

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.**

The date of this prospectus is

**TABLE OF CONTENTS**

**ABOUT THIS PROSPECTUS**

This prospectus is part of a registration statement that we filed with the SEC using a shelf registration process. Under this shelf registration process, we may sell common stock in one or more offerings up to a total dollar amount of $65,000,000. Each time we sell common stock, we will provide a prospectus supplement that will contain more specific information. We may also add, update or change in the prospectus supplement any of the information contained in this prospectus. This prospectus, together with applicable prospectus supplements, includes all material information relating to this offering. Please carefully read both this prospectus and any prospectus supplement together with the additional information described below under Where You Can Find More Information. **This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.**

You should rely only on the information we have provided or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or in the accompanying prospectus supplement. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus or in the accompanying prospectus supplement. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or the accompanying prospectus supplement or any sale of a security.

The registration statement containing this prospectus, including exhibits to the registration statement, provides additional information about us and the common stock offered under this prospectus. The registration statement can be read at the SEC web site or at the SEC offices mentioned under the heading Where You Can Find More Information.

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to the Company, Illumina , we , us , o or similar references mean Illumina, Inc.

Table of Contents

## ABOUT ILLUMINA

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. 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 the first quarter of 2001, we began commercial sale of short pieces of DNA called oligonucleotides, 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 Hap Map Project.

Our production-scale genotyping system, BeadLab, is an integrated, turnkey system that will allow researchers to perform up to 1.4 million genotypes a day. 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, a sophisticated laboratory information management system and all the automation components required to achieve its targeted capacity levels. This system is initially being marketed to a small number of high throughput genotyping users. We recently announced that a smaller scale version of this system will be available for shipment by the second quarter of 2004 which will make our BeadArray technology accessible to a much broader base of researchers and facilities.

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 June 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 will 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.

**Other Information**

Illumina, Inc. was incorporated in California in April 1998. We reincorporated in Delaware in July 2000. Our address is 9885 Towne Centre Drive, San Diego, California 92121 and our telephone number is (858) 202-4500.

Table of Contents

## RISK FACTORS

*You should carefully consider the following risks and uncertainties, together with all of the other information included in this prospectus, in any prospectus supplement, and in our other filings with the SEC, before you invest in our common stock. Investing in our common stock involves risk. We believe the following are the material risks and uncertainties we face at the present time. If any of the following risks or uncertainties actually occur, our business, financial condition or results of operations could be materially adversely affected. In any case, the trading price of our common stock could decline, and you could lose all or part of your investment. See also, Special Note Regarding Forward-Looking Statements.*

### Risks Related to Our Business

***We are currently in litigation with Applied Biosystems Group. If we are unsuccessful in defending ourselves against these claims, it could have an adverse, material affect on our business, financial condition and results of operations.***

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.

Table of Contents

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 June 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.

***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 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 system. 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

Table of Contents

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. We have encountered and may in the future encounter difficulties in manufacturing our products. 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

Table of Contents

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

Table of Contents

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

Table of Contents

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.

Table of Contents

***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.

**Risks Related to this Offering**

***Our stock price is highly volatile and you may not be able to resell your shares at or above the price you pay for them.***

The market price of our common stock has been, and is likely to continue to be, highly volatile. The following factors, among others, could have a significant impact on the market price of our common stock:

the factors listed above under *Risks Related to Our Business;*

announcements by us of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

general economic conditions;

comments made by analysts, including changes in, or failure to achieve, financial estimates by securities analysts;

Table of Contents

future sales of equity or debt securities by us; and

sales of our common stock by our directors, officers or significant stockholders.

In addition, the stock market in general and the market for stocks of life science companies in particular, have experienced significant price and volume fluctuations. Volatility in the market price for particular companies, especially companies with smaller market capitalization, has often been unrelated or disproportionate to the operating performance of those companies. These broad market and industry factors might seriously harm the market price of our common stock, regardless of our operating performance. In addition, securities class action litigation has often been initiated following periods of volatility in the market price of a company s securities. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of management s attention and resources.

***Existing stockholders have significant influence over us.***

Our executive officers, directors and five percent stockholders beneficially own, in the aggregate, approximately 43.5% of our outstanding common stock. As a result, these stockholders will be able to exercise substantial influence over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This could have the effect of delaying or preventing a change in control of our company and will make some transactions difficult or impossible to accomplish without the support of these stockholders.

Because of these rights and ownership, our officers, directors and principal stockholders will be able to significantly influence the election of directors and the approval of significant corporate transactions.

***Provisions in our charter documents and under Delaware law could prevent or delay a change of control, which could reduce the market price of our common stock.***

Certain provisions of our articles of incorporation, as amended, our bylaws, as amended, and the Delaware General Corporation Law may be deemed to have an anti-takeover effect and could discourage a third party from acquiring, or make it more difficult for a third party to acquire, control of us without approval of our board of directors.

The provisions described above and provisions of the California General Corporation Law may discourage, delay or prevent a third party from acquiring us. These provisions could also limit the price that certain investors might be willing to pay in the future for shares of our common stock.

***Management will have broad discretion as to the use of the proceeds from this offering, and we may not use the proceeds effectively.***

We have not designated the amount of net proceeds we will use for any particular purpose. Accordingly, our management will have broad discretion as to the application of the net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, our management may use the net proceeds for corporate purposes that may not increase our market value or make us profitable.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents incorporated by reference in this prospectus, includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. We have based these forward-looking statements on our current expectations and projections about future events. Our actual results could differ materially from those discussed in, or implied by, these forward-looking statements. Forward-looking statements are identified by words such as believe, anticipate, expect, intend, plan, will, may and other similar expressions. In addition, any statements that refer to expectations, projections or other

Table of Contents

characterizations of future events or circumstances are forward-looking statements. Forward-looking statements include, but are not necessarily limited to, those relating to:

- the introduction and development of new products, product improvements and new services;
- the applicability and usefulness of our technologies in various markets and industries;
- the success of our technologies;
- emerging markets in functional genetic analysis, namely SNP genotyping and gene expression profiling, and the future growth of these markets;
- demand for increased throughput in genetic analysis;
- continued advances in genomics;
- the potential to derive medically valuable information from raw genetic data and the further potential to use this information to improve drugs and therapies, to customize diagnosis and treatment, and cure disease;
- potential future partnerships, collaborations and acquisitions; and
- growth in our research and development and general and administrative expenses.

These statements are only predictions. In evaluating these statements, you should consider various factors, including the risks outlined under Risk Factors. These factors may cause actual events or our results to differ materially from those expressed or implied by any forward-looking statement. 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. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of these forward-looking statements. We are under no duty and do not intend to update any of the forward-looking statements after the date of this prospectus or to conform our prior statements to actual results.

We have not authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and the accompanying supplement to this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or the accompanying prospectus supplement. This prospectus and the accompanying supplement to this prospectus do not constitute an offer to sell or the solicitation of an offer to buy common stock, nor do this prospectus and the accompanying supplement to this prospectus constitute an offer to sell or the solicitation of an offer to buy common stock in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and the accompanying prospectus supplement is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any accompanying prospectus supplement is delivered or common stock is sold on a later date.

## USE OF PROCEEDS

We will retain broad discretion over the use of the net proceeds from the sale of our common stock offered by this prospectus. We will describe in the applicable prospectus supplement the principal purposes for which the net proceeds from the sale of common stock will be used, or, if there is no specific plan for such proceeds or any significant portion thereof, the principal reasons for such sale.

Except as described in any prospectus supplement, we currently anticipate using the net proceeds from the sale of our common stock by this prospectus primarily for general corporate purposes, which may include research and development, product manufacturing, product commercialization, working capital, reducing indebtedness, capital expenditures and general and administrative expenses. We may also use a portion of the net proceeds to acquire or invest in complementary businesses, products and technologies.

Pending the use of the net proceeds, we intend to invest the net proceeds in short-term, interest-bearing, investment-grade securities.

Table of Contents

## PLAN OF DISTRIBUTION

We may sell the common stock:

to or through one or more underwriters or dealers;

directly to purchasers, through agents; or

through a combination of any of these methods of sale.

We may distribute the common stock:

from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time;

at market prices prevailing at the times of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

We will describe the method of distribution of the common stock in the applicable prospectus supplement. Furthermore, if applicable, we will file a post-effective amendment to the registration statement of which this prospectus is a part for the purpose of naming the underwriter(s) involved in such offering.

We may determine the price or other terms of the common stock offered under this prospectus by use of an electronic auction. We will describe how any auction will determine the price or any other terms, how potential investors may participate in the auction and the nature of the obligations of the underwriter, dealer or agent in the applicable prospectus supplement. Furthermore, if applicable, we will file a post-effective amendment to the registration statement of which this prospectus is a part for the purpose of providing, among other things, a description of the terms to be established by any auction, a summary of the auction process and a fair and accurate description, or screen shots, of the Internet web pages that investors participating in the auction will see prior to the auction.

Underwriters, dealers or agents may receive compensation in the form of discounts, concessions or commissions from us or our purchasers (as their agents in connection with the sale of the common stock). In addition, underwriters may sell common stock to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/ or commissions from the purchasers for whom they act as agent. These underwriters, dealers or agents may be considered to be underwriters under the Securities Act of 1933, as amended. As a result, discounts, commissions, or profits on resale received by the underwriters, dealers or agents may be treated as underwriting discounts and commissions. Each applicable prospectus supplement will identify any such underwriter, dealer or agent, and describe any compensation received by them from us. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time.

We may enter into agreements that provide for indemnification against certain civil liabilities, including liabilities under the Securities Act of 1933, as amended, or for contribution with respect to payments made by the underwriters, dealers or agents and to reimburse these persons for certain expenses.

We may grant underwriters who participate in the distribution of the common stock an option to purchase additional shares of common stock to cover over-allotments, if any, in connection with the distribution. Underwriters or agents and their associates may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

In connection with the offering of the common stock, certain underwriters and selling group members and their respective affiliates, may engage in transactions that stabilize, maintain or otherwise affect the market price of the common stock. These transactions may include stabilization transactions effected in accordance with Rule 104 of Regulation M promulgated by the SEC pursuant to which these persons may bid for or purchase common stock for the purpose of stabilizing its market price.

Table of Contents

The underwriters in an offering of the common stock may make short sales of shares of our common stock and may purchase shares of our common stock on the open market to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. There are two types of short sales: covered short sales and naked short sales. Covered short sales are sales made in an amount not greater than the underwriters overallotment option to purchase additional shares in the offering. In contrast, naked short sales are sales in excess of the overallotment option. In general, a naked short position is more likely to be created if underwriters are concerned that there may be downward pressure on the market price of our common stock in the open market after pricing that could adversely affect investors who purchase in the offering.

The method by which underwriters may close out short sales depends on the type of short sale involved. To close out a covered short position, underwriters may either exercise their overallotment option or purchase shares of our common stock in the open market. In determining the source of shares to close out a covered short position, underwriters may consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the overallotment option. To close out a naked short position, underwriters must purchase shares in the open market. In addition, any managing underwriter may impose penalty bids under contractual arrangements with other underwriters, which means that they can reclaim from an underwriter (or any selling group member participating in the offering) for the account of the other underwriters, the selling concession for the common stock that are distributed in the offering but subsequently purchased for the account of the underwriters in the open market.

Any of the short sale or penalty bids transactions described in the foregoing paragraphs or comparable purchase transactions that are described in any accompanying prospectus supplement may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of the our common stock may be higher than the price that might otherwise exist in the open market. None of the transactions described in the foregoing paragraphs or in an accompanying prospectus supplement are required to be taken by any underwriters and, if they are undertaken, may be discontinued at any time.

## LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon by Heller Ehrman White & McAuliffe LLP. Certain legal matters will be passed upon for any agents or underwriters by counsel for such agents or underwriters identified in the applicable prospectus supplement.

## EXPERTS

Ernst & Young LLP, independent auditors, have audited our consolidated financial statements included in our annual report on form 10-K for the year ended December 28, 2003, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in this registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP s report, given on their authority as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith file reports, proxy statements and other information with the Securities and Exchange Commission. Our filings are available to the public over the Internet at the Securities and Exchange

Table of Contents

Commission s website at http://www.sec.gov. You may also read and copy, at prescribed rates, any document we file with the Securities and Exchange Commission at the Public Reference Room of the Securities and Exchange Commission located at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the Securities and Exchange Commission at (800) SEC-0330 for further information on the Securities and Exchange Commission s Public Reference Room.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The following documents previously filed by us with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, as amended, are hereby incorporated by reference in this prospectus and made a part hereof:

Our Annual Report on Form 10-K for the year ended December 28, 2003, as filed with the SEC on March 12, 2004;

The description of our common stock contained in our registration statement on Form 8-A filed with the SEC on April 14, 2000 under the Securities Exchange Act of 1934, as amended, including any amendment or report filed for the purpose of updating such description; and

The description of our preferred stock purchase rights contained in our registration statement on Form 8-A filed with the SEC on May 14, 2001 under the Securities Exchange Act of 1934, as amended, including any amendment or report filed for the purpose of updating such description.

All documents filed with the Securities and Exchange Commission pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date of this prospectus and prior to the termination of the offering shall be deemed to be incorporated by reference into this prospectus and to be a part hereof from the date of filing of such documents. Any statement contained in any document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as modified or superseded, to constitute a part of this prospectus.

Upon written or oral request, we will provide without charge to each person to whom a copy of the prospectus is delivered a copy of the documents incorporated by reference herein (other than exhibits to such documents unless such exhibits are specifically incorporated by reference herein). You may request a copy of these filings, at no cost, by writing or telephoning us at the following address: Illumina, Inc., 9885 Towne Centre Drive, San Diego, California 92121, attn: Chief Financial Officer, (858) 202-4500.

We have authorized no one to provide you with any information that differs from that contained in this prospectus or in the accompanying prospectus supplement. Accordingly, you should only rely on the information contained or incorporated by reference in this prospectus or the accompanying prospectus supplement. You should not assume that the information in this prospectus is accurate as of any date other than the date of the front cover of this prospectus.

Table of Contents

**PART II**

**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 14.** ***Other Expenses of Issuance and Distribution.***

The following table sets forth various expenses in connection with the sale and distribution of the securities being registered. All of the amounts shown are estimates except for the Securities and Exchange Commission Registration Fee.

| | |
|---|---|
| Securities and Exchange Commission Registration Fee | $ 5,259 |
| Accounting Fees and Expenses | 40,000 |
| Legal Fees and Expenses | 100,000 |
| Printing and Engraving Expenses | 20,000 |
| Miscellaneous | 9,741 |
| Total | $175,000 |

**Item 15.** ***Indemnification of Officers and Directors.***

The Registrant is subject to Section 145 of the Delaware General Corporation Law ( Section 145 ). Section 145 permits indemnification of officers and directors of the Company under certain conditions and subject to certain limitations. Section 145 also provides that a corporation has the power to maintain insurance on behalf of its officers and directors against any liability asserted against such person and incurred by him or her in such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of Section 145.

Article VI, Section 6.1, of the Registrant s Bylaws provides for mandatory indemnification of its directors and officers and permissible indemnification of employees and other agents to the maximum extent not prohibited by the Delaware General Corporation Law. The rights to indemnity thereunder continue as to a person who has ceased to be a director, officer, employee or agent and inure to the benefit of the heirs, executors and administrators of the person. In addition, expenses incurred by a director or executive officer in defending any civil, criminal, administrative or investigative action, suit or proceeding by reason of the fact that he or she is or was a director or officer of the Registrant (or was serving at the Registrant s request as a director or officer of another corporation) shall be paid by the Registrant in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the Registrant as authorized by the relevant section of the Delaware General Corporation Law.

As permitted by Section 102(b)(7) of the Delaware General Corporation Law, the Registrant s Certificate of Incorporation provides that, pursuant to Delaware law, its directors shall not be personally liable for monetary damages for breach of the directors fiduciary duty as directors to the Registrant and its stockholders. This provision in the Certificate of Incorporation does not eliminate the directors fiduciary duty, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director s duty of loyalty to the Registrant for acts or omission not in good faith or involving international misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Section 174 of the Delaware General Corporation Law. The provision also does not affect a director s responsibilities under any other law, such as the federal securities laws or state or federal environmental laws.

The Registrant has entered into indemnification agreements with each of its directors and executive officers. Generally, the indemnification agreements attempt to provide the maximum protection permitted by Delaware law as it may be amended from time to time. Moreover, the indemnification agreements provide for

Table of Contents

certain additional indemnification. Under such additional indemnification provisions, however, an individual will not receive indemnification for judgments, settlements or expenses if he or she is found liable to the Registrant (except to the extent the court determines he or she is fairly and reasonably entitled to indemnity for expenses), for settlements not approved by the Registrant or for settlements and expenses if the settlement is not approved by the court. The indemnification agreements provide for the Registrant to advance to the individual any and all reasonable expenses (including legal fees and expenses) incurred in investigating or defending any such action, suit or proceeding. In order to receive an advance of expenses, the individual must submit to the Registrant copies of invoices presented to him or her for such expenses. Also, the individual must repay such advances upon a final judicial decision that he or she is not entitled to indemnification. The Registrant also maintains directors and officers liability insurance.

**Item 16.** ***Exhibits.***

The following documents are filed herewith (unless otherwise indicated) and made a part of this registration statement.

| Exhibit | 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. |
| 5.1 | Opinion of Heller Ehrman White & McAuliffe LLP. |
| 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. |
| 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). |
| 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. |
| 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. |

Table of Contents

| Exhibit | Description of Document |
|---|---|
| 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* | License Agreement dated January 2002 between Amersham Biosciences Corp. and Registrant (confidential treatment has been requested with respect to certain portions of this exhibit). |
| 10.24* | License Agreement dated June 2002 between Dade Behring Marburg GmbH and Registrant (confidential treatment has been requested with respect to certain portions of this exhibit). |
| 21(9) | Subsidiaries of the Company. |
| 23.1 | Consent of Ernst & Young LLP, Independent Auditors. |
| 23.2 | Consent of Heller Ehrman White & McAuliffe LLP (contained in Exhibit 5.1). |
| 24.1* | Power of Attorney. |

* Previously filed.

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 (Exhibit 99.1) filed with our Registration Statement on Form S-8 filed September 6, 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.

Table of Contents

(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 our Form 10-K for the year ended December 29, 2002 filed March 27, 2003.

**Item 17.** ***Undertakings.***

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (i) and (ii) do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, that are incorporated by reference in the registration statement.

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

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant s annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan s annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offering therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under Item 15 above, or otherwise, Registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by

**Table of Contents**

the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted against the Registrant by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

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

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

Table of Contents

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in San Diego, California, on March 29, 2004.

ILLUMINA, INC.

By: /s/ JAY T. FLATLEY

Jay T. Flatley
*President and Chief Executive Officer*

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement on Form S-3 has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

| Signature | Title | Date |
|---|---|---|
| /s/ JAY T. FLATLEY<br>Jay T. Flatley | President and Chief Executive Officer (Principal Executive Officer) | March 29, 2004 |
| /s/ TIMOTHY M. KISH<br>Timothy M. Kish | Chief Financial Officer (Principal Accounting and Financial Officer) | March 29, 2004 |
| *<br>John R. Stuelpnagel, D.V.M. | Director, Senior Vice President, Operations | March 29, 2004 |
| *<br>R. Scott Greer | Director | March 29, 2004 |
| *<br>Robert T. Nelsen | Director | March 29, 2004 |
| *<br>William H. Rastetter, Ph. D. | Director | March 29, 2004 |
| *<br>David R. Walt, Ph. D. | Director | March 29, 2004 |

*By: /s/ TIMOTHY M. KISH
Attorney-in-Fact

Table of Contents

**ILLUMINA, INC.**

**EXHIBIT INDEX**

| | |
|---|---|
| 5.1 | Opinion of Heller Ehrman White & McAuliffe LLP. |
| 23.1 | Consent of Ernst & Young LLP, Independent Auditors. |