ILLUMINA INC
Form S-3/A
June 22, 2005

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As filed with the Securities and Exchange Commission on June 22, 2005

Registration No. 333-125100

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1 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
President and Chief Executive Officer
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 LLP
275 Middlefield Road
Menlo Park, CA 94025-3506
(650) 324-7000

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

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 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.

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The information in this preliminary prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission becomes effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JUNE 22, 2005

PRELIMINARY PROSPECTUS

Illumina, Inc.

1,579,897 Shares

Common Stock

This prospectus relates to 1,579,897 shares of our common stock that were originally issued by us in connection with our acquisition of CyVera Corporation. These shares may be offered and sold from time to time by our stockholders identified beginning on page 11 of this prospectus (the selling stockholders) in transactions on the open market at the prevailing market price for the shares or in negotiated transactions at prices satisfactory to them. We will not receive any portion of the proceeds for the sale of these shares.

Investing in our securities involves a high degree of risk. See Risk Factors beginning on page 3.

Our common stock currently trades on The Nasdaq National Market under the symbol ILMN. On June 21, 2005, the last reported sales price of our common stock was $12.80 per share.

Our principal executive offices are located at 9885 Towne Centre Drive, San Diego, California 92121. Our telephone number there is (858) 202-4500.

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 ________, 2005

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ABOUT THIS PROSPECTUS

This prospectus constitutes part of the registration statement on Form S-3 filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended, utilizing a shelf registration or continuous offering process. It omits some of the information contained in the registration statement and reference is made to the registration statement for further information with respect to us and the securities we offered by the selling stockholders. Any statement contained in the prospectus concerning the provisions of any document filed as an exhibit to the registration statement or otherwise filed with the Securities and Exchange Commission is not necessarily complete, and in each instance, reference is made to the copy of the document filed.

You should rely only on information contained in or incorporated by reference in this prospectus. We have not authorized anyone to provide you with information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. These securities will not be sold in any jurisdiction where such sale is not permitted. The information contained in this prospectus is accurate only as of the date of this prospectus or earlier dates as specified herein. Our business, financial condition, results of operations and prospects may have changes since those dates.

This prospectus provides you with a general description of the common stock that will be sold pursuant to this prospectus. The registration statement filed with the Securities and Exchange Commission includes exhibits that provide more details about the matters discussed in this prospectus. You should read this prospectus and the related exhibits filed with the Securities and Exchange Commission, together with the additional information described under 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 , our , or similar references mean Illumina, Inc.

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RISK FACTORS

You should carefully consider the following risks and uncertainties, together with all of the other information included in this prospectus 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

On April 8, 2005, we acquired CyVera Corporation (CyVera   ) as a wholly-owned subsidiary. We may not realize the expected benefits of the acquisition because of integration and other challenges, which could adversely affect our business.

We have limited experience in acquisition activities and integrating the operations, technologies, products, services, information systems and personnel of Illumina and CyVera may be a complex, time consuming and expensive process that could significantly disrupt the business of the combined company. We expect our assumption of certain liabilities and our hiring of certain employees of CyVera to result in an increase in research and development expenses and our capital expenditures. Employees and management of each of Illumina and CyVera have played a key role in creating each company and the integration of these two companies will alter prior relationships and may affect productivity. If we fail to successfully meet the challenges involved in integration or otherwise fail to realize any of the anticipated benefits of the acquisition, then the results of operations of the combined company could be seriously harmed. Realizing the benefits of the acquisition, if any, will depend in part on the successful integration of technology, operations and personnel.

We may not successfully integrate the operations of CyVera and Illumina in a timely manner, or at all, and the combined company may not realize the anticipated benefits of the acquisition to the extent, or in the timeframe, anticipated. The anticipated benefits of the acquisition are based on projections and assumptions, including successful integration, not actual experience. In addition to the integration risks discussed above, the combined company   s ability to realize those benefits could be adversely effected by practical or legal constraints on its ability to combine operations.

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. While we recently settled our litigation with Applera Corporation   s Applied Biosystems Group in August 2004, Affymetrix filed a complaint against us in July 2004, alleging infringement of six of its patents, and other third parties have or may assert that we are employing their proprietary technology without authorization. As we enter new markets, we expect that competitors will likely assert that our products infringe their intellectual property rights as part of a business strategy to impede our successful entry into those markets. 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.

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We expect intense competition in our target markets, which could render our products obsolete, result in significant price reductions 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 existing companies develop new or improved products and 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, new product introductions and strong price competition. For example, Affymetrix recently released a 100k SNP genotyping chip and has announced a 500k chip which will compete with our SNP genotyping service and product offerings and several competitors have begun selling a single chip for whole human genome expression which may compete with 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 integrating future acquisitions and that could adversely affect our business.

We have limited experience in acquisition activities and may have to devote substantial time and resources in order to complete acquisitions. Further, these potential acquisitions entail risks, uncertainties and potential disruptions to our business. For example, we may not be able to successfully integrate a company s operations, technologies, products and services, information systems and personnel into our business. An acquisition may further strain our existing financial and managerial controls, and divert management s attention away from our other business concerns. There may also be unanticipated costs and liabilities associated with an acquisition that could adversely affect our operating results.

We have generated only moderate amounts 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 through most of 2005. At April 3, 2005 our accumulated deficit was $124.9 million, and we incurred a net loss of $1.2 million for the three months ended April 3, 2005. 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 new products. 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.

We have 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 relatively 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. Sales of our genotyping and gene expression systems only began in 2003, 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 similarly situated companies 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 and we currently have fewer resources available for research and development activities than many of our competitors. We may not be able to develop or launch new products in a timely manner, or at all, or they may not

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meet customer requirements or be of sufficient quality or price that enables us to compete effectively in the marketplace. Problems frequently encountered in connection with the development or early commercialization of products and services using new and relatively 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. 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.

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. 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.

We have limited experience in manufacturing commercial products.

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, 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 launch or 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.

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

We currently have fewer resources available for sales and marketing and technical support services as compared to our primary competitors 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.

If we are unable to develop and maintain operation of 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.

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.

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 outcome of our legal proceedings with Affymetrix and the need to enter into collaborations with other companies or acquire other companies or technologies to enhance or complement our product and service offerings. We anticipate that our existing capital resources will enable us to maintain currently planned operations for at least 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 within this timeframe. 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, such as an acquisition, 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 available as of June 22, 2005. 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 and chief operating officer. 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 52% of our revenues for the year ended January 2, 2005 and approximately 64% of our revenues for the three months ended April 3, 2005 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.

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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. 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 not be able to achieve or sustain profitability.

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

Our revenues are subject to fluctuations due to the timing of sales of high-value products and services projects, the impact of seasonal spending patterns, the timing and amount of government grant funding programs, the timing and size of research projects our customers perform, changes in overall spending levels in the life sciences industry and other unpredictable factors that may affect customer ordering patterns. Given the difficulty in predicting the timing and magnitude of sales for our products and services, 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. Approximately 30% of our revenues for the year 2004 and 16% of revenues for the first quarter of 2005 resulted from transactions that were funded under the International HapMap Project. We believe virtually all of the activities under this grant involving the Company and its customers were completed in early 2005. Although we expect that the loss of revenues resulting from the completion of the HapMap grant may be offset by the planned commercial launch of our whole genome genotyping arrays and our recently launched whole genome gene expression arrays, combined with the continued expansion of our existing product lines, any significant delays in the commercial launch of new products, unfavorable sales trends in our existing product lines, or impacts from the other factors mentioned above, could adversely affect our revenue growth in 2005 or cause a sequential decline in quarterly revenues. 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;

future sales of equity or debt securities by us; and

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

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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.

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 certificate 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.

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

- the anticipated benefits of our acquisition of CyVera;
- 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, gene expression profiling and proteomics, 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. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus. This prospectus does not constitute an offer to sell or the solicitation of an offer to buy common stock, nor does 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 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 is delivered or common stock is sold on a later date.

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USE OF PROCEEDS

All net proceeds from the sale of the shares of our common stock covered by this prospectus will go to the selling stockholders who offer and sell their shares. We will not receive any proceeds from the sale of these shares by the selling stockholders.

SELLING STOCKHOLDERS

All of the common stock registered for sale pursuant to this prospectus are owned by the selling stockholders. All of the shares offered hereby were acquired by the selling stockholders in connection with our acquisition of CyVera and pursuant to an Agreement and Plan of Merger, dated as of February 22, 2005, among us, Semaphore Acquisition Sub, Inc. and CyVera (the Merger Agreement). Alan D. Kersey, one of the selling stockholders, is an executive officer of Illumina. Alan D. Kersey s wife is the trustee of the Kersey Family Trust, another of the selling stockholders. Certain of the selling stockholders are affiliates of CiDRA Corporation, which subleases to CyVera the property in which its offices are located. No other selling stockholder has a material relationship with us, except that certain selling stockholders are non-officer employees of Illumina.

The following table sets forth certain information known to us with respect to beneficial ownership of our common stock as of May 18, 2005, by each selling stockholder. Under SEC rules, shares of our common stock subject to options held by a selling stockholder that are either currently exercisable or exercisable within 60 days of May 18, 2005 are deemed outstanding. Such shares, however, are not deemed outstanding for the purpose of computing the percentage ownership of any other selling stockholder. Information about the selling stockholder may change over time. Any changed information given to us by the selling stockholders will be set forth in prospectus supplements if and when necessary. Because the selling stockholders may offer all or some portion of the shares, we have assumed for purposes of the table below that all shares covered by this prospectus will be sold. We are unable to determine the exact number of shares that actually will be sold. We do not know how long the selling stockholders will hold the shares before selling them and we currently have no agreements, arrangements or understandings with any of the selling stockholders regarding the sale of any of the shares, except that David R. Huber and F. Kevin Didden entered into lock-up agreements with the Company which impose restrictions on their ability to engage in transactions involving the shares beneficially owned by them, including, among others, a restriction that they cannot directly or indirectly dispose of such shares prior to July 7, 2005.

	Number of Shares Beneficially Owned Prior to the Offering	Number of Shares Offered by this Prospectus	Shares Beneficially Owned After the Offering	
Selling Stockholders			**Number of Shares**	**Percentage(1)**
David R. Huber(2)	238,490	238,490		*
F. Kevin Didden (3)	162,914	162,914		*
KS Teknoinvest V(2)	120,257	120,257		*
First Reserve Fund VIII, L.P. (2)	100,010	100,010		*
Connecticut Innovations, Incorporated(2)	89,004	89,004		*
Alan D. Kersey (4)(5)	75,797	67,082	8,715	*
FOL Liquidation Trust(2)	49,236	49,236		*
Axiom Venture Partners II, Limited Partnership(2)	46,537	46,537		*

First Reserve Fund VII, Limited Partnership(2)	42,861	42,861	*
Didden Investment LLC(3)	42,440	42,440	*
Optical Capital Group, LLC(2)	40,765	40,765	*
Phillip E. and Mary S. Pruett Trustees for the Phillip E. and Mary S. Pruett 2002 Revocable Living Trust(3)	35,594	35,594	*
Michael Grillo(3)	26,011	26,011	*
CII/NEV LLC(2)	25,458	25,458	*
United Eastern Investment Corp. (2)	22,250	22,250	*
Coastdock & Co.(2)	17,952	17,952	*
Spanglestar & Co.(2)	17,952	17,952	*

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Selling Stockholders	Number of Shares Beneficially Owned Prior to the Offering	Number of Shares Offered by this Prospectus	Shares Beneficially Owned After the Offering Number of Shares	Shares Beneficially Owned After the Offering Percentage(1)
Optoinvest AS(3)	17,797	17,797		*
The Hodson Trust(2)	17,604	17,604		*
Cargolamp & Co.(2)	17,053	17,053		*
KS Teknoinvest VI(2)	16,664	16,664		*
John Moon(4)(6)	16,514	13,690	2,824	*
Venturos I DA(2)	14,009	14,009		*
Daniel L. Gysling(3)	13,690	13,690		*
Terrence J. Brennan(4)(7)	13,248	9,583	3,665	*
MSD Portfolio, L.P. Investments(2)	12,835	12,835		*
Gerald L. DePardo(4)(8)	12,342	9,583	2,759	*
John V. Viega(3)	12,320	12,320		*
Grosvenor Fund, L.P.(2)	11,514	11,514		*
James Sirkis(4)(9)	11,086	6,845	4,241	*
Frederick J. Leonberger(2)	10,622	10,622		*
Martin A. Putnam(4)(10)	10,231	8,214	2,017	*
Mark R. Fernald(3)	9,583	9,583		*
Morgan Stanley Dean Witter Equity Funding, Inc.(2)	8,527	8,527		*
Amerindo Technology Growth Fund II, Inc.(2)	8,319	8,319		*
Sumitomo Electric Industries, Ltd.(2)	8,269	8,269		*
Michael A. Davis(3)	8,214	8,214		*
Robert J. Maron(3)	8,214	8,214		*
Michael Sapack(3)	8,214	8,214		*
Velocity Capital, LLC(2)	5,713	5,713		*
Paul Rothman(3)	5,476	5,476		*
Infosys Technologies Limited(2)	5,385	5,385		*
Amerindo Internet Fund PLC(2)	5,380	5,380		*
Emerging Technology Portfolio(2)	5,379	5,379		*
Grosvenor Select, LP(2)	4,961	4,961		*
Tharald Brovig(2)	4,497	4,497		*
Pilot Holdings, L.P.(2)	4,459	4,459		*
Wheatley Partners III, L.P.(2)	4,228	4,228		*
HRLD LP(2)	4,132	4,132		*
David Bellemore(3)	4,106	4,106		*
Paul C. Dolan(3)	4,106	4,106		*
James R. Dunphy(3)	4,106	4,106		*
Arthur D. Hay(3)	4,106	4,106		*
Keith R. Morley(3)	4,106	4,106		*
Kim D. Larsen(2)	3,721	3,721		*
MSD Select Sponsors Venture Capital Partnership, L.P.(2)	3,590	3,590		*

VPF CiDRA Investments II, LLC(2)	3,016	3,016	*
David A. Volgel(2)	2,862	2,862	*
Quarry OM Partners, LLC(2)	2,862	2,862	*
Thomas Lips(2)	2,829	2,829	*
John Biesak(3)	2,737	2,737	*
Allen R. Davis(3)	2,737	2,737	*
John J. Grunbeck(3)	2,737	2,737	*
Hay Asset Management LLC(3)	2,737	2,737	*
Ann Iseley(3)	2,737	2,737	*

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Selling Stockholders	Number of Shares Beneficially Owned Prior to the Offering	Number of Shares Offered by this Prospectus	Shares Beneficially Owned After the Offering Number of Shares	Percentage(1)
Kersey Family Trust(3)	2,737	2,737		*
Laurie Lombardi(3)	2,737	2,737		*
Pratt & Whitney Division of United Technologies Corporation(3)	2,737	2,737		*
Paul Sanders(3)	2,737	2,737		*
Jian-Qun Wu(3)	2,737	2,737		*
Lene AS(2)	2,705	2,705		*
Venturos Holdings AS(2)	2,380	2,380		*
Glastad Capital AS(2)	2,380	2,380		*
David Fournier(4)(11)	2,221	1,368	853	*
The David R. Huber Grantor Retained Annuity Trust(2)	2,139	2,139		*
Langdøla Invest AS(2)	1,904	1,904		*
Asmund Slogedal(2)	1,837	1,837		*
Gezina AS(2)	1,817	1,817		*