

Solexa, Inc.
Form 424B3
February 14, 2006

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**Filed Pursuant to Rule 424(b)(3)
Registration Statement No 333-131343**

PROSPECTUS

13,500,000 Shares

SOLEXA, INC.

Common Stock

This prospectus relates to the offer and sale, from time to time, of up to 13,500,000 shares of our common stock, which includes 3,500,000 shares of our common stock issuable to the selling stockholders upon the exercise of warrants to purchase our common stock, by certain of the selling stockholders listed in the section beginning on page 11 of this prospectus. We are not selling any common stock under this prospectus and will not receive any of the proceeds from the sale of shares by the selling stockholders.

The selling stockholders may sell the shares of common stock described in this prospectus in a number of different ways and at varying prices. We provide more information about how the selling stockholders may sell their shares of common stock in the section titled **Plan of Distribution** on page 20. We will not be paying any underwriting discounts or commissions in this offering.

Our common stock is listed on the Nasdaq Capital Market under the symbol **SLXA**. On February 13, 2006, the last reported sale price for our common stock was \$9.59 per share.

Investment in our common stock involves a high degree of risk. See **Risk Factors beginning on page 2 of this prospectus.**

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is February 14, 2006.

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This prospectus is part of a registration statement we filed with the Securities and Exchange Commission, or the SEC. You should rely only on the information we have provided or incorporated by reference in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus 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 any sale of our common stock.

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PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere in this prospectus or incorporated by reference. While we have included what we believe to be the most important information about the company and this offering, the following summary may not contain all the information that may be important to you. You should read this entire prospectus carefully, including the risks of investing discussed under Risk Factors beginning on page 2, the financial statements and related notes, and the information to which we refer you and the information incorporated into this prospectus by reference, for a complete understanding of our business and this offering. References in this prospectus to our company, we, our, Solexa and us refer to Solexa, Inc. Reference to selling stockholders refers to those stockholders listed herein under Selling Stockholders, who may sell shares from time to time as described in this prospectus.

Solexa, Inc.

We are in the business of developing and commercializing genetic analysis technologies. We are currently developing and preparing to commercialize a novel instrumentation system for genetic analysis based on our reversible-terminator Sequencing-by-Synthesis, or SBS, chemistry and based on our Clonal Single Molecule Array[™] technology. This platform is expected to support many types of genetic analyses, including DNA sequencing, gene expression and small RNA analysis. We believe that this technology, which can potentially generate over a billion bases of DNA sequence from a single experiment with a single sample preparation, will dramatically reduce the cost, and improve the practicality, of human re-sequencing relative to conventional technologies. We introduced our first-generation system, the Solexa Genome Analysis System, in 2005 and we anticipate commencing sales of the system in the first half of 2006. We believe our new DNA sequencing system will enable us to implement a new business model based primarily on the sales of genetic analysis equipment, reagents and other consumables and services to end user customers. Our longer-term goal is to further reduce the cost of human re-sequencing to a few thousand dollars for use in a wide range of applications from basic research through clinical diagnostics.

We incorporated in the state of Delaware in February 1992. In March 2005, we completed the combination of our company with Solexa Limited, a company registered in England and Wales, and changed our name from Lynx Therapeutics, Inc. to Solexa, Inc. Our principal executive offices are located at 25861 Industrial Blvd., Hayward, CA 94545. Our telephone number is (510) 670-9300. Our website address is <http://www.solexa.com>. We do not incorporate the information on our website into this prospectus, and you should not consider it part of this prospectus.

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RISK FACTORS

Investment in our shares involves a high degree of risk. In addition to the other information in this prospectus, you should carefully consider the risks described below, which we believe are the material risks we face, before purchasing our common stock. If any of the following risks actually occurs, our business could be materially harmed, and our financial condition and results of operations could be materially and adversely affected. As a result, the trading price of our common stock could decline, and you might lose all or part of your investment. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties, not presently known to us, or that we currently see as immaterial, may also harm our business. If any of these additional risks and uncertainties occurs, the trading price of our common stock could decline, and you might lose all or part of your investment.

We have a history of net losses, expect to continue to incur net losses and may not achieve or maintain profitability.

We have incurred net losses each year since our inception, including a net loss for the three months and nine months ended September 30, 2005. As of September 30, 2005, we had an accumulated deficit of approximately \$48.0 million. Net losses may continue for the next several years as we proceed with the development and commercialization of our technologies. The presence and size of these potential net losses will depend, in part, on the rate of growth, if any, or decline in revenues and on the level of expenses. Research and development expenditures and sales, general and administrative costs have exceeded revenues to date, and these expenses may increase in the future. We will need to generate significant revenues to achieve profitability, and even if we are successful in achieving profitability, there is no assurance we will be able to sustain profitability.

It is uncertain whether we will be able to successfully develop and commercialize our new products or to what extent we can increase our revenues or become profitable.

We set out to develop new DNA sequencing technologies and we are now using those technologies to develop new genetic analysis instruments, consumables and services. If our strategy does not result in the development of products that we can commercialize, we will be unable to generate significant revenues. Furthermore, there is no guarantee that we will be able to sell our instruments and consumables on terms that will generate profits or positive cash flow. Although we have developed DNA sequencing machines that we currently use in providing gene expression services to customers, these are based on the MPSS technology developed by Lynx rather than the new technologies currently under development. We cannot be certain that we will successfully develop any new products or that they will receive commercial acceptance, in which case we may not be able to recover our investment in the product development.

Our technology platform is at the development stage and is unproven for market acceptance.

While some of our gene expression technology has been commercialized and is currently in use, we are developing additional technologies to generate information about gene sequences that may enable scientists to better understand complex biological processes. These technologies are still in development, and we may not be able to successfully complete development of these technologies or commercialize them. Our success depends on many factors, including:

technical performance of our technologies in relation to competing technologies;

the acceptance of our technology in the market place;

our ability to establish an instrument manufacturing capability, or obtain instruments from another manufacturer; and

our ability to manufacture reagents and other consumables, or obtain licenses to resell reagents and other consumables.

You must evaluate us in light of the uncertainties and complexities affecting an early stage genetic analysis systems company. The application of our technologies is in too early a stage to determine whether they can be successfully implemented. Our technologies also depend on the successful integration of independent technologies,

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each of which has its own development risks. Furthermore, we are anticipating that, if our technology is able to successfully reduce the cost of genetic analysis relative to existing providers, our technology may be able to displace current technology as well as expand the market for genetic analysis to include new applications that are not practical with current technology. Many of our potential customers must, in turn, demonstrate to governmental and other funding sources that our technology has been successfully developed before they can make substantial purchases of our products. Such governmental funding requires that the NIH and other government granting agencies continue to support genomic research as they have in the past. There is no guarantee, even if our technology is able to successfully reduce the cost of genetic analysis relative to existing providers, that we will be able to induce customers with installed bases of conventional genetic analysis instruments to purchase our system or expand the market for genetic analysis to include new applications. Furthermore, if we are only able to successfully commercialize our genetic analysis systems as a replacement for existing technology, we may face a much smaller market than we currently anticipate.

We have limited experience in sales and marketing and thus may be unable to further commercialize our genetic analysis instrument systems and services.

Our ability to achieve profitability depends on attracting customers for our genetic analysis instrument systems and services. There are a limited number of research institutes and pharmaceutical, biotechnology and agricultural companies that are potential customers for our products and services. To market our products, we intend to develop a sales and marketing group with the appropriate technical expertise. We may not successfully build such a sales force. In addition, we may seek to enlist a third party to assist with sales and distribution globally or in certain regions of the world. There is no guarantee, if we do seek to enter into such an arrangement, that we will be successful in attracting a desirable sales and distribution partner, or that we will be able to enter into such an arrangement on favorable terms. If our sales and marketing efforts, or those of any third-party sales and distribution partner, are not successful, our technologies and products may not gain market acceptance, which could materially impact our business operations.

We will need to develop manufacturing capacity by ourselves or with a partner.

If we are successful in achieving market acceptance for our new genetic analysis instruments, we will need to either build internal manufacturing capacity or contract with a manufacturing partner. There is no assurance that we will be able to build manufacturing capacity internally, or find a manufacturing partner, to meet both the volume and quality requirements necessary to be successful in the market. Any delay in establishing or inability to expand our manufacturing capacity could hurt our business.

We intend to implement a business model that is unproven and different from our former business model.

Our current business model is based primarily on the planned sales of genetic analysis instruments and future sales of reagents and other consumables and services to support customers in their use of that equipment. Other commercial arrangements may take the form of equipment leases, equipment placement and reagent rental arrangements, and collaborations with customers at academic, government and commercial labs.

Our historical business model was based on providing genomics services using our MPSS technology and supplying customers with DNA sequences and other information that resulted from experiments. A change in emphasis from our former business model may cause our current customers to delay, defer or cancel any purchasing decisions with respect to new or existing agreements and we have had discussions with current customers with respect to such potential delay, deferral or cancellation of any existing agreements. There is no assurance that we will be successful in changing the emphasis of our business model from providing genomics services to selling instruments, consumables and support services to new or existing customers.

We may need to raise additional funding, which may not be available on favorable terms, if at all.

We may need to raise additional capital through public or private equity or debt financings in order to satisfy our projected capital needs.

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The amount of additional capital we may need to raise depends on many factors, including:

the progress and scope of research and development programs;

the progress of efforts to develop and commercialize new products and services; and

the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims and other intellectual property rights.

We cannot be certain that additional capital will be available when and as needed or that our actual cash requirements will not be greater than anticipated. If we require additional capital at a time when investment in biotechnology companies or in the marketplace in general is limited due to the then prevailing market or other conditions, we may not be able to raise such funds at the time that we desire or any time thereafter. If we are unable to obtain financing on terms favorable to us, our stockholders may experience greater than expected dilution, we may be unable to execute our business plan, and we may be required to cease or reduce development or commercialization of our products, sell some of all of our technology or assets or merge with another entity.

We currently depend on a small number of our genomics services customers for substantially all our revenues.

Our strategy for the commercialization of our technologies includes entering into customer agreements in which we provide genomics services to research institutes and pharmaceutical, biotechnology and agricultural companies. At present, our genomics services business generates substantially all of our revenues. After we have developed our new genetic analytical instrument systems, it is our intention to deploy these systems over time to replace the instruments currently used in our genomics services business, which operate based on our MPSS technology. If we are successful in commercializing our genetic analysis instrument systems, we anticipate continuing to provide genomics services after the commercial launch in order to meet particular customer requirements and to support the marketing of our instruments by, for example, allowing potential systems customers to understand how our instrumentation performs on their samples of interest. There is no guarantee, however, that any of our customers will migrate to the new technology platform once it is commercialized or that our genomics services business will generate positive cash flow or become profitable.

Prior to our business combination with Solexa Limited, Lynx derived substantially all of its revenues from customer agreements, collaborations and licenses related to our genomics services business. This continues to be the case for Solexa since the business combination. A significant portion of our revenues comes from a small number of customers. Thus, unless and until we are able to commercialize our new genetic analysis instrument systems under development, we will be dependent on a small number of customers to continue our current genomics services business, and the loss of one or more of those customers could harm our results of operations.

Capacity reduction in our genomic services business due to failure of our MPSS instruments, information technology systems or work processes could impair our profitability.

Our genomic service business utilizes proprietary MPSS instruments and information systems. In addition, the MPSS process is lengthy and complex. These instruments, systems and work processes are subject to intermittent failures. Any production stoppages or reduced yields due to these factors or otherwise could reduce the number of samples we are able to process and the revenues we recognize and could increase our loss.

Our sales cycle for our genomics services business is lengthy, and we may spend considerable resources on unsuccessful sales efforts or may not be able to enter into agreements on the schedule we anticipate.

Our ability to obtain customers for our technologies and products depends in significant part upon the perception that our technologies and products can help accelerate their drug discovery and genomics efforts. Our sales cycle for our genomics services business is typically lengthy, in many cases nine months or more, because we need to educate our potential customers and sell the benefits of our services to a variety of constituencies within such entities. In addition, we may be required to negotiate agreements containing terms unique to each customer. We may expend substantial funds and management effort without any assurance that we will successfully sell our

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technologies and products. Actual and proposed consolidations of pharmaceutical companies have negatively affected, and may in the future negatively affect, the timing and progress of our sales efforts.

We operate in an intensely competitive industry with rapidly evolving technologies, and our competitors may develop products and technologies that make ours obsolete.

The biotechnology industry is highly fragmented and is characterized by rapid technological change. In particular, the areas of genetic analysis platforms and genomics research are rapidly evolving fields. Competition among entities developing genetic analysis systems is intense. Many of our competitors have substantially greater research and product development capabilities and financial, scientific and marketing resources than we do.

In our genomics services business, we face, and will continue to face, competition primarily from biotechnology companies, such as Affymetrix, Inc., Celera Genomics Group, Gene Logic, Inc., and the Agencourt Biosciences business of Beckman Coulter, Inc., academic and research institutions and government agencies, both in the United States and abroad. We are aware that certain entities are using a variety of gene expression analysis methodologies, including chip-based systems, to attempt to identify disease-related genes and to perform clinical diagnostic tests. A number of large companies offer DNA sequencing equipment or consumables including Applied Biosystems, Beckman Coulter, Inc., and the Amersham Biosciences business of General Electric Company. A number of other companies and academic groups are also in the process of developing novel techniques for DNA sequencing. These companies include, among others, 454 Corporation, the Agencourt Biosciences business of Beckman Coulter, Inc., Helicos Biosciences, Pacific Biosciences, Visigen Biotechnologies, Inc. and GenoVoxx GmbH. A number of large companies offer gene expression equipment including Affymetrix, Inc., Agilent Technologies, Applied Biosystems, and Illumina Inc. In order to successfully compete against existing and future technologies, we will need to demonstrate to potential customers that our technologies and capabilities are superior to those of our competitors, which we may or may not be able to do.

In addition, numerous pharmaceutical, biotechnology and agricultural companies are developing genomics research programs, either alone or in partnership with our competitors. Our future success will depend on our ability to maintain a competitive position with respect to technological advances. Rapid technological development by others may make our technologies and future products obsolete.

Any products developed based on our technologies will compete in highly competitive markets. Our competitors may be more effective at using their technologies to develop commercial products than we are. Moreover, some of our competitors have, and others may, introduce novel genetic analysis platforms before we do so, which, if adopted by customers, could eliminate the market for our new genetic analysis systems. Further, our competitors may obtain intellectual property rights that would limit the use of our technologies or the commercialization of diagnostic or therapeutic products using our technologies. As a result, our competitors' products or technologies may render our technologies and products obsolete or noncompetitive.

We may not realize the benefits we expect from the combination of Solexa Limited and Lynx.

The integration of Solexa Limited and Lynx has been and will be complex, time consuming and expensive, and may disrupt our business. We will need to overcome significant challenges in order to realize any benefits or synergies from the combination of Solexa Limited and Lynx. These challenges include the timely, efficient and successful execution of a number of tasks related generally to the transaction and in particular to product development programs.

We may not succeed in addressing these risks or any other problems encountered in connection with the combination. The inability to successfully integrate the operations, technology and personnel of Solexa Limited and Lynx, or any significant delay in achieving integration, could hurt our business and, as a result, the market price of our common

stock could decline.

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If management is unable to effectively manage the increased size and complexity of the combined company, our operating results will suffer.

As of December 30, 2005, the 62 employees of Solexa Limited, our UK subsidiary, are based near Cambridge, United Kingdom and our 57 U.S. employees are based in Hayward, California. As a result we face challenges inherent in efficiently managing and coordinating the activities of our increased number of employees located in different countries, including the need to implement appropriate systems, financial controls, policies, standards, benefits and compliance programs. The inability to successfully manage the substantially larger and internationally diverse organization, or any significant delay in achieving successful management, could hurt our business, and, as a result, the market price of our common stock could decline.

We are subject to risks associated our international operations which may harm our business.

A significant portion of our research and development and other operations are located in the United Kingdom which subjects us to a number of risks associated with conducting business outside of the United States, including, but not limited to:

fluctuations in currency exchange rates;

imposition of additional taxes and penalties; and

the burdens of complying with foreign laws.

Currently, the lease agreement for our facilities in Cambridge, United Kingdom and most of our employment arrangements with our employees and consultants in the United Kingdom provide for payment in British pounds. Increases in the value of the British pound relative to the United States dollar will increase our expenses related to our operations in the United Kingdom, which could negatively impact our ability to compete. To date, we have not engaged in any currency hedging activities, although we may do so in the future. Fluctuations in currency exchange rates could harm our business in the future, and, as a result, the market price of our common stock could decline.

We have a new management team that may not be able to define or execute our business plan.

Effective March 4, 2005, John West was named our chief executive officer. Mr. West had been the chief executive officer of Solexa Limited since August 2004. Effective March 10, 2005, Peter Lundberg was named our vice president and chief technical officer. Effective March 31, 2005, Linda Rubinstein was named our vice president and chief financial officer. Several additional senior staff members have been hired as well. While Mr. West has experience managing private scientific instrument companies and large teams within a public U.S. company, he has not previously been chief executive of a public company in the U.S. Mr. West anticipates dividing his time between our operations in California and our operations in the U.K. for the foreseeable future. These executives are new to our company and may not be effective, individually or as a group, in executing our business plan, and our operating results may suffer as a result.

We could lose key personnel, which could materially affect our business and require us to incur substantial costs to recruit replacements for lost personnel.

As a result of the combination, current and prospective employees of the combined company could experience uncertainty or disappointment with their roles within the combined company. Any of our key personnel could terminate their employment, sometimes without notice, at any time. People key to the operation and management of the combined company are John West, our chief executive officer, Peter Lundberg, our vice president and chief

technical officer, Linda Rubinstein, our vice president and chief financial officer, and Tony Smith, our vice president and chief scientific officer. We are also highly dependent on the principal members of our scientific and commercial staff. The loss of any of these persons' services might adversely impact the achievement of our commercial objectives. In addition, recruiting and retaining qualified scientific personnel to perform future research and development work will be critical to our success. There is currently a shortage of skilled executives and employees with technical expertise, and this shortage is likely to continue. As a result, competition for skilled personnel is intense and turnover rates are high. Competition for experienced scientists from numerous companies, academic and other research institutions may limit our ability to attract and retain new or current personnel.

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If we fail to adequately protect our proprietary technologies, third parties may be able to use our technologies, which could prevent us from competing in the market.

Our success depends in part on our ability to obtain patents and maintain adequate protection of the intellectual property related to our technologies and products. The patent positions of genetic analysis instrument, reagents and other consumables sales and services companies and other biotechnology companies, including us, are generally 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. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the U.S., and many companies have encountered significant problems in protecting and defending their proprietary rights in foreign jurisdictions. We have applied and will continue to apply for patents covering our technologies, processes and products, as and when we deem appropriate. However, third parties may challenge these applications, or these applications may fail to 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. Furthermore, others may independently develop similar or alternative technologies or design around our patents. In addition, our patents may be challenged or invalidated or fail to provide us with any competitive advantage.

We also rely on trade secret protection for our confidential and proprietary information. However, trade secrets are difficult to protect. We protect our proprietary information and processes, in part, with confidentiality agreements with employees and consultants. However, third parties may breach these agreements, we may not have adequate remedies for any such breach or our trade secrets may still otherwise become known by our competitors. In addition, our competitors may independently develop substantially equivalent proprietary information.

Litigation or third-party claims of intellectual property infringement could require us to spend substantial time and money and adversely affect our ability to develop and commercialize our technologies and products.

Our commercial success depends in part on our ability to avoid infringing patents and proprietary rights of third parties and not breaching any licenses that we have entered into with regard to our technologies. Other parties have filed, and in the future are likely to file, patent applications covering imaging, image analysis, fluid delivery, DNA arrays on solid surfaces, chemical and biological reagents for DNA sequencing, genes, gene fragments, proteins, the analysis of gene sequences, gene expression and protein expression, DNA amplification and the manufacture and use of DNA chips or microarrays, which are tiny glass or silicon wafers on which tens of thousands of DNA molecules can be arrayed on the surface for subsequent analysis. If patents covering technologies required by our operations are issued to others, we may have to rely on licenses from third parties, which may not be available on commercially reasonable terms, or at all.

Third parties may accuse us of employing their proprietary technology without authorization. In addition, third parties may obtain patents that relate to our technologies and claim that use of such technologies infringes these patents. Regardless of their merit, such claims could require us to incur substantial costs, including the diversion of management and technical personnel, in defending ourselves against any such claims or enforcing our patents. In the event that a successful claim of infringement is brought against us, we may need to pay damages and obtain one or more licenses from third parties. We may not be able to obtain these licenses at a reasonable cost, or at all. Defense of any lawsuit or failure to obtain any of these licenses could adversely affect our ability to develop and commercialize our technologies and products and thus prevent us from achieving profitability.

We use hazardous chemicals and radioactive and biological materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

Our research and development processes involve the controlled use of hazardous materials, including chemicals and radioactive and biological materials. Our operations produce hazardous waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials, and our

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liability may exceed our insurance coverage and our total assets. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of hazardous materials. Compliance with environmental laws and regulations may be expensive, and current or future environmental regulations may impair our research, development and production efforts.

We currently utilize a single supplier to purchase PacI, an enzyme used in our MPSS service.

PacI is a restriction enzyme used to digest the PCR product that is loaded onto 5-micron beads prior to MPSS sequencing. We currently purchase PacI from New England BioLabs under a supply agreement, the term of which is scheduled to expire on May 25, 2006. Our reliance on a sole vendor involves several risks, including:

- the inability to obtain an adequate supply due to manufacturing capacity constraints, a discontinuation of a product by a third-party manufacturer or other supply constraints;
- the potential lack of leverage in contract negotiations with the sole vendor;
- reduced control over quality and pricing of components; and
- delays and long lead times in receiving materials from vendors.

We do not believe, however, that our business is dependent substantially on PacI or the intellectual property associated with PacI. We believe that we would be able to purchase alternative enzymes from other providers without incurring significant additional expenses or time delays should the need arise. In addition, if we are able to successfully implement new reversible-terminator SBS sequencing technologies under development in our genetic services business, we will no longer require PacI. We may seek to extend or renew our contract with New England Biolabs and believe we can do so without unreasonable effort or expense.

Our facilities in Hayward, California are located near known earthquake fault zones, and the occurrence of an earthquake or other catastrophic disaster could cause damage to our facilities and equipment, which could require us to cease or curtail operations.

Our facilities in Hayward, California are located near known earthquake fault zones and are vulnerable to damage from earthquakes. We are also vulnerable to damage from other types of disasters, including fire, floods, power loss, communications failures and similar events. If any disaster were to occur, our ability to operate our business at our facilities would be seriously, or potentially completely, impaired. In addition, the unique nature of our research activities could cause significant delays in our programs and make it difficult for us to recover from a disaster. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions. Accordingly, an earthquake or other disaster could materially and adversely harm our ability to conduct business.

Ethical, legal and social issues may limit the public acceptance of, and demand for, our technologies and products.

Our customers may seek to develop diagnostic products based on genes or proteins. The prospect of broadly available gene-based diagnostic tests raises ethical, legal and social issues regarding the appropriate use of gene-based diagnostic testing and the resulting confidential information. It is possible that discrimination by third-party payers, based on the results of such testing, could lead to the increase of premiums by such payers to prohibitive levels, outright cancellation of insurance or unwillingness to provide coverage to individuals showing unfavorable genetic sequences or gene or protein expression profiles. Similarly, employers could discriminate against employees with genetic sequences or gene or protein expression profiles indicative of the potential for high disease-related costs and

lost employment time. Finally, government authorities could, for social or other purposes, limit or prohibit the use of such tests under certain circumstances. These and other ethical, legal and social concerns about genetic testing and target identification may limit market acceptance of our technologies and products.

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Our common stock is currently listed on the Nasdaq Capital Market, which subjects us to various statutory requirements.

With our securities listed on the Nasdaq Capital Market (*formerly* the Nasdaq SmallCap Market), we face a variety of legal and other consequences that will likely negatively affect our business including, without limitation, the following:

we may have lost our exemption from the provisions of Section 2115 of the California Corporations Code, which imposes aspects of California corporate law on certain non-California corporations operating within California. As a result, (i) our stockholders may be entitled to cumulative voting and (ii) we may be subject to more stringent stockholder approval requirements and more stockholder-favorable dissenters' rights in connection with certain strategic transactions;

the state securities law exemptions available to us are more limited, and, as a result, future issuances of our securities may require time-consuming and costly registration statements and qualifications;

due to the application of different securities law exemptions and provisions, we have been required to amend our stock option plan, suspend our stock purchase plan and must comply with time-consuming and costly administrative procedures;

we have been unable to obtain coverage of our company by securities analysts; and

we may lose current or potential investors.

Our stock price may be extremely volatile.

We believe that the market price of our common stock will remain highly volatile and may fluctuate significantly due to a number of factors. The market prices for securities of many publicly held, early-stage biotechnology companies have in the past been, and can in the future be expected to be, especially volatile. For example, during the period from December 31, 2004 to December 31, 2005, the closing sales price of our common stock as quoted on the Nasdaq Capital Market fluctuated from a low of \$4.48 to a high of \$19.99 per share. In addition, the securities markets have from time to time experienced significant price and volume fluctuations that may be unrelated to the operating performance of particular companies. The following factors and events may have a significant and adverse impact on the market price of our common stock:

fluctuations in our operating results;

announcements of technological innovations or new commercial products by us or our competitors;

release of reports by securities analysts;

developments or disputes concerning patent or proprietary rights;

developments in our relationships with current or future customers; and

general market conditions.

Many of these factors are beyond our control. These factors may cause a decrease in the market price of our common stock, regardless of our operating performance.

Our officers, directors and their affiliated entities have substantial control over the company.

As of January 20, 2006, our executive officers, directors and entities affiliated with them, in the aggregate, beneficially own approximately 42% of the company, including warrants exercisable within 60 days of January 20, 2006. These stockholders, if acting together, would be able to influence significantly all matters requiring approval by our stockholders, including the election of directors and the approval of mergers or other changes in corporate control.

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Anti-takeover provisions in our charter documents and under Delaware law may make it more difficult to acquire us or to effect a change in our management, even though an acquisition or management change may be beneficial to our stockholders.

Under our certificate of incorporation, our board of directors has the authority, without further action by the holders of our common stock, to issue 2,000,000 shares of preferred stock from time to time in series and with preferences and rights as it may designate. These preferences and rights may be superior to those of the holders of our common stock. For example, the holders of preferred stock may be given a preference in payment upon our liquidation or for the payment or accumulation of dividends before any distributions are made to the holders of common stock.

Any authorization or issuance of preferred stock, while providing desirable flexibility in connection with financings, possible acquisitions and other corporate purposes, could also have the effect of making it more difficult for a third party to acquire a majority of our outstanding voting stock or making it more difficult to remove directors and to effect a change in management. The preferred stock may have other rights, including economic rights senior to those of our common stock, and, as a result, an issuance of additional preferred stock could lower the market value of our common stock. Provisions of Delaware law may also discourage, delay or prevent someone from acquiring or merging with us.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some of the statements in this prospectus and the documents incorporated by reference are forward-looking statements. These statements are based on our current expectations, assumptions, estimates and projections about our business and our industry, and involve known and unknown risks, uncertainties and other factors that may cause our industry's results, levels of activity, performance or achievement to be materially different from any future results, performance or achievements expressed or implied in or contemplated by the forward-looking statements. Words such as believe, anticipate, expect, intend, plan, will, may, should, estimate, predict, potential, such terms or other similar expressions, identify forward-looking statements. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. Our actual results could differ materially from those anticipated in such forward-looking statements as a result of several factors more fully described under the caption Risk Factors above and in the documents incorporated by reference. The forward-looking statements made in this prospectus relate only to events as of the date on which the statements are made. We do not undertake any obligation to update forward-looking statements. The risks contained in this prospectus, among other things, should be considered in evaluating our prospects and future financial performance.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the shares by the selling stockholders. All proceeds from the sale of the shares will be for the accounts of the selling stockholders.

A portion of the shares covered by this prospectus are issuable upon exercise of warrants to purchase our common stock. Upon any exercise for cash of the warrants, the selling stockholders will pay us the exercise price of the warrants. The cash exercise price of the warrants is \$7.50 per share of our common stock. The warrants are also exercisable on a cashless basis under certain circumstances. We will not receive any cash payment from the selling stockholders upon any exercise of the warrants on a cashless basis.

SELLING STOCKHOLDERS

On November 18, 2005, we entered into securities purchase agreements, or the Purchase Agreement, with the investors listed therein, providing for the sale of up to an aggregate of 10,000,000 shares of our common stock at a price per share of \$6.50 and warrants to purchase up to 3,500,000 shares of our common stock at an exercise price of \$7.50 per share. On November 23, 2005, we issued 3,851,840 shares of our common stock and warrants to purchase up to 1,348,145 shares of common stock at an exercise price of \$7.50 per share to the investors. On January 19, 2006 we issued 6,148,160 shares of common stock and warrants to purchase up to 2,151,855 shares of common stock at an exercise price of \$7.50 per share to the investors. The warrants are exercisable 180 days from the date of issuance and expire 5 years from the date of issuance.

The shares being offered hereunder include the 3,500,000 shares of our common stock issuable upon the exercise of the warrants issued pursuant to the Purchase Agreement.

The following table presents information regarding the selling stockholders and the shares that they may offer and sell from time to time under this prospectus.

This table is prepared based on information supplied to us by the listed selling stockholders, and reflects holdings as of January 20, 2006. The term selling stockholders includes the stockholders listed below and their transferees,

pledgees, donees or other successors. The number of shares in the column "Number of Shares Being Offered" represents all of the shares that a selling stockholder may offer under this prospectus, and assumes the exercise of all the warrants for common stock held by such selling stockholder. The selling stockholders may sell some, all or none of their shares. 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 the selling stockholders regarding the sale of any of the shares. The shares offered by this prospectus may be offered from time to time by the selling stockholders.

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Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Securities Exchange Act of 1934, as amended, and includes warrants held by the selling stockholders that become exercisable greater than 60 days from January 20, 2006. Unless otherwise noted, none of the share amounts set forth below represents more than 1% of our outstanding stock as of January 20, 2006, adjusted as required by the rules promulgated by the SEC. The percentages of shares beneficially owned prior to the offering are based on 36,300,335 shares of our common stock outstanding as of January 20, 2006.

Security Holders	Shares of Common Stock Beneficially Owned		Number of Shares Being Offered	Shares of Common Stock Beneficially Owned	
	Prior to Offering Number	Percent		After Offering Number	Percent
Abingworth Bioequities Master Fund Limited(1)	415,395	1.1%	415,395	0	*
Oxford Bioscience Partners IV L.P.(2) (3)	1,446,614	4.0%	411,259	1,035,355	2.9%
mRNA Fund II L.P.(2) (4)	14,515	*	4,127	10,388	*
Amadeus II A LP(5) (6)	2,323,507	6.4%	233,654	2,089,853	5.8%
Amadeus II B LP(5) (7)	1,549,006	4.3%	155,770	1,393,236	3.8%
Amadeus II C LP(5) (8)	1,084,305	3.0%	109,038	975,267	2.7%
Amadeus II D GmbH & Co KG(5) (9)	51,635	*	5,192	46,443	*
Amadeus II Affiliates Fund LP(5)(10)	154,899	*	15,576	139,323	*
ValueAct Capital Master Fund, L.P.(11)	3,124,040	8.6%	311,540	2,812,500	7.7%
SF Capital Partners Ltd.(12)	1,724,046	4.7%	269,999	1,454,047	4.0%
Special Situations Fund III, L.P.(13)	664,615	1.8%	664,615	0	*
Special Situations Cayman Fund, L.P.(14)	166,154	*	166,154	0	*
Special Situations Private Equity Fund, L.P.(15)	103,846	*	103,846	0	*
Special Situations Life Sciences Fund, L.P.(16)	103,846	*	103,846	0	*
SRB Greenway Capital (QP), L.P.(17)	253,260	*	253,260	0	*
SRB Greenway Capital, L.P.(18)	38,008	*	38,008	0	*
SRB Greenway Offshore Operating Fund, L.P.(19)	20,270	*	20,270	0	*
Capital Ventures International(20)	667,818	1.8%	467,307	200,511	*
Enable Opportunity Partners(21)	57,114	*	57,114	0	*
Enable Growth Partners(22)	202,500	*	202,500	0	*
Prothro Family Limited Partnership, L.P.(23)	56,074	*	43,574	12,500	*
Cimarron Biomedical Equity Master Fund, L.P.(24)	139,775	*	89,775	50,000	*

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Omicron Master Trust(25)	396,975	1.1%	207,692	189,283	*
O Connor PIPEs Corporate Strategies Master Limited(26)	269,999	*	269,999	0	*
Nite Capital LP(27)	187,020	*	155,770	31,250	*
EGI-NP Investments, LLC(28)	46,745	*	46,745	0	*
The Jay Pritzker Foundation(29)	15,582	*	15,582	0	*
CD Investment Partners Ltd.(30)	249,307	*	249,307	0	*
Topwater Exclusive Fund II, LLC(31)	32,805	*	32,805	0	*
D3 Life Science Ltd.(32)	51,925	*	51,925	0	*
D3 Life Science Select Ltd.(33)	51,922	*	51,922	0	*

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Security Holders	Shares of Common Stock Beneficially Owned		Number of Shares Being Offered	Shares of Common Stock Beneficially Owned	
	Prior to Offering Number	Percent		After Offering Number	Percent
Caduceus Capital Master Fund Limited(34)	425,250	1.2%	425,250	0	*
Caduceus Capital II, L.P.(35)	202,500	*	202,500	0	*
UBS Eucalyptus Fund, LLC(36)	306,450	*	306,450	0	*
PW Eucalyptus Fund, Ltd.(37)	33,750	*	33,750	0	*
HFR SHC Aggressive Master Trust(38)	70,200	*	70,200	0	*
The Aries Master Fund II, L.P.(39)	17,134	*	17,134	0	*
Aries Domestic Fund, L.P.(40)	29,596	*	29,596	0	*
Aries Domestic Fund II, L.P. (41)	5,193	*	5,193	0	*
RAQ, LLC(42)	51,924	*	51,924	0	*
Steeple Capital Fund I, L.P.(43)	9,990	*	9,990	0	*
Steeple Capital Fund II, L.P. (44)	95,499	*	95,499	0	*
Steeple Capital Offshore Fund, Ltd.(45)	161,325	*	161,325	0	*
Steeple Capital Offshore Fund III, Ltd.(46)	44,820	*	44,820	0	*
Orphan Fund, L.P.(47)	797,092	2.2%	726,924	70,168	*
Nanocap Fund, L.P.(48)	290,016	*	264,857	25,159	*
Nanocap Qualified Fund, L.P.(49)	506,740	1.4%	462,066	44,674	*
Walker Smith Capital, L.P.(50)	16,428	*	16,428	0	*
Walker Smith Capital (Q.P.), L.P.(51)	100,088	*	100,088	0	*
Walker Smith International Fund, Ltd.(52)	142,684	*	142,684	0	*
HHMI Investments, L.P.(53)	52,338	*	52,338	0	*
Bristol Investment Fund Ltd.(54)	103,847	*	103,847	0	*
Clarion Capital Corporation(55)	103,847	*	103,847	0	*
Crestview Capital Master, LLC(56)	623,078	1.7%	623,078	0	*
Fidelity Securities Fund:					
Fidelity OTC Portfolio(57)	3,266,213	9.0%	3,115,386	150,827	*
SDS Capital International, Ltd.(58)	415,386	1.1%	415,386	0	*
Shea Ventures, LLC as Nominee 2005-02(59)	166,258	*	166,258	0	*
Tang Capital Partners, L.P.(60)	529,616	1.5%	529,616	0	*
Total Number of Shares Offered			13,500,000		

* Represents beneficial ownership of less than 1%.

(1) The number of shares being offered includes 307,700 shares of common stock and 107,695 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement. Joe

Anderson has voting and investment control of the securities held by Abingworth Bioequities Master Fund Limited and disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein. Abingworth Bioequities Master Fund Limited is managed by Abingworth Management Ltd., which also manages Abingworth Bioventures III A, B, C and Executives LP and is investment advisor to Abingworth Bioventures II SICAV. Genghis Lloyd-Harris, a director of Solexa, Inc., is an employee of Abingworth Management Ltd.

- (2) OBP Management IV L.P. is the general partner for Oxford Bioscience Partners IV L.P. and mRNA Fund II L.P. Voting and investment power for the shares of record owned by Oxford Bioscience Partners IV L.P. and mRNA Fund II L.P. is shared by the general partners of OBP Management IV L.P., including Jonathan

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Fleming, Alan Walton, Jeffrey Barnes, Michael Lytton and Mark Carthy, a former director of the Company. Douglas Fambrough, a director of the Company, is affiliated with Oxford Bioscience Partners IV, L.P. and mRNA Fund II L.P. and does not possess voting and/or investment power of the shares held by these entities. Oxford Bioscience Partners IV L.P. and mRNA Fund II L.P. are affiliated with a member of the National Association of Securities Dealers, Inc., or NASD, and they have represented to us that the shares and warrants held by them were purchased in the ordinary course of business and that at the time of purchase of the shares and warrants held by them, they were not aware of any agreements or understandings, directly or indirectly, with any person to distribute the shares held by them or the common stock issuable upon exercise of the warrants held by them.

- (3) The number of shares being offered includes 304,636 shares of common stock and 106,623 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement.
- (4) The number of shares being offered includes 3,057 shares of common stock and 1,070 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement.
- (5) Amadeus II General Partner LP, a Scottish limited liability partnership, is the general partner of Amadeus II A LP, Amadeus II B LP, Amadeus II C LP, Amadeus II D GmbH & Co KG and Amadeus II Affiliates Fund LP. Amadeus General Partner Limited, the general partner of Amadeus II General Partner LP, is a wholly-owned subsidiary of Amadeus Capital Partners Ltd., or ACPL. By contract, ACPL manages the affairs of Amadeus II A LP, Amadeus II B LP, Amadeus II C LP, Amadeus II D GmbH & Co KG and Amadeus II Affiliates Fund LP. Anne Glover, Hermann Hauser, a director of the Company, Richard Anton, Roy Merritt, Peter Wynn are directors of ACPL and have voting and investment power of the shares held by such entity and disclaim beneficial ownership of such shares except to the extent of their pecuniary interest therein.
- (6) The number of shares being offered includes 173,077 shares of common stock and 60,577 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement.
- (7) The number of shares being offered includes 115,385 shares of common stock and 40,385 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement.
- (8) The number of shares being offered includes 80,769 shares of common stock and 28,269 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement.
- (9) The number of shares being offered includes 3,846 shares of common stock and 1,346 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement.
- (10) The number of shares being offered includes 11,538 shares of common stock and 4,038 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement.
- (11) G. Mason Morfit, a director of the Company, is a non-managing member of VA Partners, LLC, which is the general partner of ValueAct Capital Master Fund, L.P. Mr. Morfit disclaims beneficial ownership of the shares owned by ValueAct Capital Master Fund, L.P. Jeffrey W. Ubben, George F. Hamel, Jr. and Peter H. Kamin have voting and control of the securities held by ValueAct Capital Master Fund, L.P. The number of shares being offered includes 230,770 shares of common stock and 80,770 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement.
- (12) The number of shares being offered includes 199,999 shares of common stock and 70,000 shares of common stock issuable upon exercise of warrants purchased in the private placement.

- (13) The number of shares being offered includes 492,307 shares of common stock and 172,308 shares of common stock issuable upon exercise of warrants purchased in the private placement. MGP Advisers Limited Partnership, or MGP, a Delaware limited partnership, is the general partner of the Special Situations Fund III, L.P. and Special Situations Fund III QP, L.P., Delaware Limited Partnerships. AVM Investment Company, Inc., or AVM, a Delaware corporation, is the general partner of MGP and the general partner of and investment adviser to the Cayman Fund. MG Advisers, L.L.C., or MG, a New York limited liability company, is the general partner of and investment adviser to the Special Situations Private Equity Fund, L.P. LS Advisers, L.L.C., or LS, a New York limited liability company, is the general partner of and investment adviser to the Special Situations Life Sciences Fund, L.P. Austin W. Marx and David M. Greenhouse are the principal owners of MGP, AVM, LS and MG and are principally responsible for the selection, acquisition and disposition of the portfolios securities by the investment advisers on behalf of their Fund.

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- (14) The number of shares being offered includes 123,077 shares of common stock and 43,077 shares of common stock issuable upon exercise of warrants purchased in the private placement.
- (15) The number of shares being offered includes 76,923 shares of common stock and 26,923 shares of common stock issuable upon exercise of warrants purchased in the private placement.
- (16) The number of shares being offered includes 76,923 shares of common stock and 26,923 shares of common stock issuable upon exercise of warrants purchased in the private placement.
- (17) The number of shares being offered includes 187,600 shares of common stock and 65,660 shares of common stock issuable upon exercise of warrants purchased in the private placement.
- (18) The number of shares being offered includes 28,154 shares of common stock and 9,854 shares of common stock issuable upon exercise of warrants purchased in the private placement.
- (19) The number of shares being offered includes 15,015 shares of common stock and 5,255 shares of common stock issuable upon exercise of warrants purchased in the private placement.
- (20) The number of shares being offered includes 346,153 shares of common stock and 121,154 shares of common stock issuable upon exercise of warrants purchased in the private placement. Capital Ventures International is affiliated with members of the NASD and has represented to us that the shares and warrants held by it were purchased in the ordinary course of business and that at the time of purchase of the shares and warrants held by it, it was not aware of any agreements or understandings, directly or indirectly, with any person to distribute the shares held by it or the common stock issuable upon exercise of the warrants held by it.
- (21) The number of shares being offered includes 42,307 shares of common stock and 14,807 shares of common stock issuable upon exercise of warrants purchased in the private placement. Mitch Levine is the managing partner of Enable Opportunity Partners. Enable Opportunity Partners LP is affiliated with members of the NASD and has represented to us that the shares and warrants held by it were purchased in the ordinary course of business and that at the time of purchase of the shares and warrants held by it, it was not aware of any agreements or understandings, directly or indirectly, with any person to distribute the shares held by it or the common stock issuable upon exercise of the warrants held by it.
- (22) The number of shares being offered includes 150,000 shares of common stock and 52,500 shares of common stock issuable upon exercise of warrants purchased in the private placement. Mitch Levine is the managing partner of Enable Growth Partners. Enable Growth Partners is affiliated with members of the NASD and has represented to us that the shares and warrants held by it were purchased in the ordinary course of business and that at the time of purchase of the shares and warrants held by it, it was not aware of any agreements or understandings, directly or indirectly, with any person to distribute the shares held by it or the common stock issuable upon exercise of the warrants held by it.
- (23) The number of shares being offered includes 32,277 shares of common stock and 11,297 shares of common stock issuable upon exercise of warrants purchased in the private placement. J. H. Cullum, managing general partner, Caren H. Prothro, general partner, Nita P. Clark, general partner and Vincent H. Prothro have voting and investment control of the securities held by Prothro Family Limited Partnership, L.P.
- (24) The number of shares being offered includes 66,500 shares of common stock and 23,275 shares of common stock issuable upon exercise of warrants purchased in the private placement. These shares are beneficially owned by Cimarron Biomedical Equity Master Fund, L.P., formerly known as Cimarron Overseas Equity

Master Fund, L.P. Cimarron Biomedical Equity Master Fund, L.P. is wholly-owned by Cimarron Biomedical Equity Fund, L.P., formerly known as Cimarron Overseas Equity Fund (QP), L.P. Cimarron Biomedical Investors, L.P. is the general partner of Cimarron Biomedical Equity Fund, L.P. Cimarron Global Management, LLC is the general partner of Cimarron Biomedical Investors, L.P. J.H. Cullum Clark is the sole principal of Cimarron Global Management, LLC, and in such capacity has full voting and investment control over the shares beneficially owned by Cimarron Biomedical Equity Master Fund, L.P. Mr. Clark expressly disclaims beneficial ownership of the shares beneficially owned by Cimarron Biomedical Equity Master Fund, L.P.

- (25) The number of shares being offered includes 153,846 shares of common stock and 53,846 shares of common stock issuable upon exercise of warrants purchased in the private placement. Omicron Capital, L.P., a Delaware limited partnership, or Omicron Capital, serves as investment manager to Omicron Master Trust, a trust formed under the laws of Bermuda, or Omicron, Omicron Capital, Inc., a Delaware corporation, or OCI,

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serves as general partner of Omicron Capital, and Winchester Global Trust Company Limited, or Winchester, serves as the trustee of Omicron. By reason of such relationships, Omicron Capital and OCI may be deemed to share dispositive power over the shares of our common stock owned by Omicron, and Winchester may be deemed to share voting and dispositive power over the shares of our common stock owned by Omicron. Omicron Capital, OCI and Winchester disclaim beneficial ownership of such shares of our common stock. Omicron Capital has delegated authority from the board of directors of Winchester regarding the portfolio management decisions with respect to the shares of common stock owned by Omicron and, as of January 20, 2006, Mr. Olivier H. Morali and Mr. Bruce T. Bernstein, officers of OCI, have delegated authority from the board of directors of OCI regarding the portfolio management decisions of Omicron Capital with respect to the shares of common stock owned by Omicron. By reason of such delegated authority, Messrs. Morali and Bernstein may be deemed to share dispositive power over the shares of our common stock owned by Omicron. Messrs. Morali and Bernstein disclaim beneficial ownership of such shares of our common stock and neither of such persons has any legal right to maintain such delegated authority. No other person has sole or shared voting or dispositive power with respect to the shares of our common stock being offered by Omicron, as those terms are used for purposes under Regulation 13D-G of the Securities Exchange Act of 1934, as amended. Omicron and Winchester are not affiliates of one another, as that term is used for purposes of the Securities Exchange Act of 1934, as amended, or of any other person named in this prospectus as a selling stockholder. No person or group (as that term is used in Section 13(d) of the Securities Exchange Act of 1934, as amended, or the SEC's Regulation 13D-G) controls Omicron and Winchester.

- (26) The number of shares being offered includes 200,000 shares of common stock and 69,999 shares of common stock issuable upon exercise of warrants purchased in the private placement. UBS O Connor LLC is the investment manager of O Connor PIPE Corporate Strategies Master Limited. As investment manager, UBC O Connor has voting and investment control of the securities held by O Connor PIPEs Corporate Strategies Master Limited.
- (27) The number of shares being offered includes 115,385 shares of common stock and 40,385 shares of common stock issuable upon exercise of warrants purchased in the private placement. Keith Goudman, a manger of the general partner of Nite Capital LP, has voting and investment control of securities held by Nite Capital LP.
- (28) The number of shares being offered includes 34,626 shares of common stock and 12,119 shares of common stock issuable upon exercise of warrants purchased in the private placement. John Ziegelman is present of CD Capital Management, LLC and has voting and investment control of securities held by EGI-NP Investments, LLC.
- (29) The number of shares being offered includes 11,542 shares of common stock and 4,040 shares of common stock issuable upon exercise of warrants purchased in the private placement. John Ziegelman is present of CD Capital Management, LLC and has voting and investment control of securities held by The Jay Pritzker Foundation.
- (30) The number of shares being offered includes 184,672 shares of common stock and 64,635 shares of common stock issuable upon exercise of warrants purchased in the private placement. John Ziegelman is present of CD Capital Management, LLC and has voting and investment control of securities held by CD Investment Partners, Ltd.
- (31) The number of shares being offered includes 24,300 shares of common stock and 8,505 shares of common stock issuable upon exercise of warrants purchased in the private placement. Topwater Investment Management LLC is the managing member of the Topwater Exclusive Fund II LLC. Its principals are Travis Taylor and Bryan Borgia. The Managing Member has granted to J.H. Cullum Clark, as Manager and sole Principal for Cimarron Global Management LLC, dba Cimarron Biomedical Investors, or collectively, the Cimarron Group, limited

power of attorney/trading authority on specific assets of the Topwater Exclusive Fund II LLC. Topwater Investment Management LLC has granted to the Cimarron Group full voting control and investment authority over the share beneficially owned by Topwater Exclusive Fund II LLC. Mr. Clark expressly disclaims beneficial ownership of the shares beneficially owned by Topwater Exclusive Fund II LLC. Mr. Taylor and Mr. Borgia expressly disclaim beneficial ownership of the shares except to the extent of their pecuniary interest in the Topwater Exclusive Fund II LLC.

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- (32) The number of shares being offered includes 38,463 shares of common stock and 13,462 shares of common stock issuable upon exercise of warrants purchased in the private placement. Nathan Fischel has both voting and investment control over the securities held by D3 Life Science Ltd. and disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (33) The number of shares being offered includes 38,461 shares of common stock and 13,461 shares of common stock issuable upon exercise of warrants purchased in the private placement. Nathan Fischel has both voting and investment control over the securities held by D3 Life Science Select Ltd. and disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (34) The number of shares being offered includes 315,000 shares of common stock and 110,250 shares of common stock issuable upon exercise of warrants purchased in the private placement. OrbiMed Capital LLC has both voting and investment rights over the securities held by Caduceus Capital Master Fund Limited. Samuel D. Isaly is managing member of OrbiMed Capital LLC and disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (35) The number of shares being offered includes 150,000 shares of common stock and 52,500 shares of common stock issuable upon exercise of warrants purchased in the private placement. OrbiMed Capital LLC has both voting and investment rights over the securities held by Caduceus Capital II, L.P. Samuel D. Isaly is managing member of OrbiMed Capital LLC and disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (36) The number of shares being offered includes 227,000 shares of common stock and 79,450 shares of common stock issuable upon exercise of warrants purchased in the private placement. OrbiMed Capital LLC has both voting and investment rights over the securities held by UBS Eucalyptus Fund, LLC. Samuel D. Isaly is managing member of OrbiMed Capital LLC and disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (37) The number of shares being offered includes 25,000 shares of common stock and 8,750 shares of common stock issuable upon exercise of warrants purchased in the private placement. OrbiMed Capital LLC has both voting and investment rights over the securities held by PW Eucalyptus Fund, Ltd. Samuel D. Isaly is managing member of OrbiMed Capital LLC and disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (38) The number of shares being offered includes 52,000 shares of common stock and 18,200 shares of common stock issuable upon exercise of warrants purchased in the private placement. OrbiMed Capital LLC has both voting and investment rights over the securities held by HFR SHC Aggressive Master Trust. Samuel D. Isaly is managing member of OrbiMed Capital LLC and disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (39) The number of shares being offered includes 12,692 shares of common stock and 4,442 shares of common stock issuable upon exercise of warrants purchased in the private placement. The Aries Master Fund II, L.P. is affiliated with members of the NASD and has represented to us that the shares and warrants held by it were purchased in the ordinary course of business and that at the time of purchase of the shares and warrants held by it, it was not aware of any agreements or understandings, directly or indirectly, with any person to distribute the shares held by it or the common stock issuable upon exercise of the warrants held by it. Paramount BioCapital Asset Management, Inc., or PBCAM is the investment manager of the Aries Master Fund II, L.P. Lindsay A. Rosenwald is the sole stockholder, Chairman, and CEO of PBCAM.

- (40) The number of shares being offered includes 21,923 shares of common stock and 7,673 shares of common stock issuable upon exercise of warrants purchased in the private placement. The Aries Domestic Fund, L.P. is affiliated with members of the NASD and has represented to us that the shares and warrants held by it were purchased in the ordinary course of business and that at the time of purchase of the shares and warrants held by it, it was not aware of any agreements or understandings, directly or indirectly, with any person to distribute the shares held by it or the common stock issuable upon exercise of the warrants held by it. Paramount BioCapital Asset Management, Inc., or PBCAM is the investment manager of the Aries Domestic Fund, L.P. Lindsay A. Rosenwald is the sole stockholder, Chairman, and CEO of PBCAM.
- (41) The number of shares being offered includes 3,847 shares of common stock and 1,346 shares of common stock issuable upon exercise of warrants purchased in the private placement. The Aries Domestic Fund II, L.P.

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is affiliated with members of the NASD and has represented to us that the shares and warrants held by it were purchased in the ordinary course of business and that at the time of purchase of the shares and warrants held by it, it was not aware of any agreements or understandings, directly or indirectly, with any person to distribute the shares held by it or the common stock issuable upon exercise of the warrants held by it. PBCAM is the investment manager of the Aries Domestic Fund II, L.P. Lindsay A. Rosenwald is the sole stockholder, Chairman, and CEO of PBCAM.

- (42) The number of shares being offered includes 38,462 shares of common stock and 13,462 shares of common stock issuable upon exercise of a warrant that was purchased in the second closing of the private placement. RAQ, LLC is affiliated with members of the NASD and has represented to us that the shares and warrants held by it were purchased in the ordinary course of business and that at the time of purchase of the shares and warrants held by it, it was not aware of any agreements or understandings, directly or indirectly, with any person to distribute the shares held by it or the common stock issuable upon exercise of the warrants held by it. Lindsay A. Rosenwald is the managing member of RAQ, LLC.
- (43) The number of shares being offered includes 7,400 shares of common stock and 2,590 shares of common stock issuable upon exercise of warrants purchased in the private placement. Steeple Capital LP has voting and investment control over the securities owned by Steeple Capital Fund I, L.P. John J. Regan and Jeremy Green are the partners of Steeple Capital LP and disclaim beneficial ownership in the securities except to the extent of their pecuniary interest therein.
- (44) The number of shares being offered includes 70,740 shares of common stock and 24,759 shares of common stock issuable upon exercise of warrants purchased in the private placement. Steeple Capital LP has voting and investment control over the securities owned by Steeple Capital Fund II, L.P. John J. Regan and Jeremy Green are the partners of Steeple Capital LP and disclaim beneficial ownership in the securities except to the extent of their pecuniary interest therein.
- (45) The number of shares being offered includes 119,500 shares of common stock and 41,825 shares of common stock issuable upon exercise of warrants purchased in the private placement. Steeple Capital LP has voting and investment control over the securities owned by Steeple Capital Offshore Fund Ltd. John J. Regan and Jeremy Green are the partners of Steeple Capital LP and disclaim beneficial ownership in the securities except to the extent of their pecuniary interest therein.
- (46) The number of shares being offered includes 33,200 shares of common stock and 11,620 shares of common stock issuable upon exercise of warrants purchased in the private placement. Steeple Capital LP has voting and investment control over the securities owned by Steeple Steeple Capital Offshore Fund III, Ltd. John J. Regan and Jeremy Green are the partners of Steeple Capital LP and disclaim beneficial ownership in the securities except to the extent of their pecuniary interest therein.
- (47) The number of shares being offered includes 538,462 shares of common stock and 188,462 shares of common stock issuable upon exercise of warrants purchased in the private placement. Stephens Investment Management, LLC has voting and investment control over the securities owned by Orphan Fund, L.P. Paul H. Stephens, P. Bart Stephens and W. Brad Stephens are the managing members of Stephens Investment Management, LLC.
- (48) The number of shares being offered includes 196,190 shares of common stock and 68,667 shares of common stock issuable upon exercise of warrants purchased in the private placement. Stephens Investment Management, LLC has voting and investment control over the securities owned by Nanocap Fund, L.P. Paul H. Stephens, P. Bart Stephens and W. Brad Stephens are the managing members of Stephens Investment Management, LLC.

- (49) The number of shares being offered includes 342,272 shares of common stock and 119,794 shares of common stock issuable upon exercise of warrants purchased in the private placement. Stephens Investment Management, LLC has voting and investment control over the securities owned by Nanocap Qualified Fund, L.P. Paul H. Stephens, P. Bart Stephens and W. Brad Stephens are the managing members of Stephens Investment Management, LLC.
- (50) The number of shares being offered includes 12,169 shares of common stock and 4,259 shares of common stock issuable upon exercise of warrants purchased in the private placement. Reid S. Walker and G. Stacy Smith are the general partners of Walker Smith Capital, L.P.

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- (51) The number of shares being offered includes 74,139 shares of common stock and 25,949 shares of common stock issuable upon exercise of warrants purchased in the private placement. Reid S. Walker and G. Stacy Smith are the general partners of Walker Smith Capital (Q.P.), L.P.
- (52) The number of shares being offered includes 105,692 shares of common stock and 36,992 shares of common stock issuable upon exercise of warrants purchased in the private placement. Reid S. Walker and G. Stacy Smith are the general partners of Walker Smith International Fund, Ltd.
- (53) The number of shares being offered includes 38,769 shares of common stock and 13,569 shares of common stock issuable upon exercise of warrants purchased in the private placement. Reid S. Walker and G. Stacy Smith are the general partners of HHMI Investments, L.P.
- (54) The number of shares being offered includes 76,924 shares of common stock and 26,923 shares of common stock issuable upon exercise of warrants purchased in the private placement. Bristol Capital Advisors LLC, or BCA, is the investment advisor to Bristol Investment Fund, Ltd., or BIF. Paul Kessler is the manager of BCA and as such has voting and investment control over the securities held by BIF. Mr. Kessler disclaims beneficial ownership of these securities.
- (55) The number of shares being offered includes 76,924 shares of common stock and 26,923 shares of common stock issuable upon exercise of warrants purchased in the private placement. Morton A. Cohen has voting and investment control of the securities held by Clarion Capital Corporation.
- (56) The number of shares being offered includes 461,539 shares of common stock and 161,539 shares of common stock issuable upon exercise of warrants purchased in the private placement.
- (57) The number of shares being offered includes 2,307,693 shares of common stock and 807,693 shares of common stock issuable upon exercise of warrants purchased in the private placement. The entity is a registered investment fund, or the Fund, advised by Fidelity Management & Research Company, or FMR Co., a registered investment adviser under the Investment Advisers Act of 1940, as amended. FMR Co., 82 Devonshire Street, Boston, Massachusetts 02109, a wholly-owned subsidiary of FMR Corp. and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, is the beneficial owner of 3,621,866 shares (including the number of shares the warrants are exercisable into) of the common stock outstanding of the Company as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940. Edward C. Johnson 3d, FMR Corp., through its control of FMR Co., and the Fund each has sole power to dispose of the securities owned by the Fund. Neither FMR Corp. nor Edward C. Johnson 3d, Chairman of FMR Corp., has the sole power to vote or direct the voting of the shares owned directly by the Fund, which power resides with the Fund's Board of Trustees. The Fund is affiliated with members of the NASD and has represented to us that the shares and warrants held by it were purchased in the ordinary course of business and that at the time of purchase of the shares and warrants held by it, it was not aware of any agreements or understandings, directly or indirectly, with any person to distribute the shares held by it or the common stock issuable upon exercise of the warrants held by it.
- (58) The number of shares being offered includes 307,693 shares of common stock and 107,693 shares of common stock issuable upon exercise of warrants purchased in the private placement. Steve Derby is the sole managing member of SDS Management, LLC, the investment advisor of SDS Capital International, Ltd. and has voting and investment control over the securities held by SDS Capital International, Ltd. Mr. Derby disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein.
- (59)

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The number of shares being offered includes 123,154 shares of common stock and 43,104 shares of common stock issuable upon exercise of warrants purchased in the private placement. Edmund H. Shea, Ron Lakey, John F. Shea and Peter O. Shea have voting and investment control over the securities held by Shea Ventures, LLC as Nominee 2005-02.

- (60) The number of shares being offered includes 392,308 shares of common stock and 137,308 shares of common stock issuable upon exercise of warrants purchased in the private placement. Kevin C. Tang has voting and investment control over the securities owned by Tang Capital Partners.

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PLAN OF DISTRIBUTION

The selling stockholders, which used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell any or all of their shares of common stock on any stock exchange, automated interdealer quotation system, market or trading facility on which the shares are traded, in the over-the-counter market, or in private transactions. These dispositions may be at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to prevailing market prices, at varying prices determined at the time of sale or at prices otherwise negotiated. The selling stockholders may use any one or more of the following methods when selling shares:

on The Nasdaq Capital Market (or any other exchange or automated quotation system on which the shares may be listed);

the over-the-counter market;

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short sales;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise,

through the distribution of the common stock by any selling stockholders to its partners, members or stockholders,

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

a combination of any such methods of sale; and

any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

The selling stockholders may also engage in short sales against the box, puts and calls and other transactions in our securities or derivatives of our securities and may sell or deliver shares in connection with these trades.

The selling stockholders may from time to time pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time under this prospectus after we have filed an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved. Any profits on the resale of shares of common stock by a broker-dealer acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. Discounts, concessions, commissions and similar selling expenses, if any, attributable to the sale of shares will be borne by a selling stockholder. The selling

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stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares if liabilities are imposed on that person under the Securities Act.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the shares of common stock or interests therein may be underwriters within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are underwriters within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

The aggregate proceeds to the selling stockholders from the sale of the shares of common stock offered by them will be the purchase price of the shares less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants. The warrants are also exercisable on a cashless basis under certain circumstances. We will not receive any cash payment from the selling stockholders upon any exercise of the warrants on a cashless basis.

The selling stockholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their shares of common stock, nor is there an underwriter or coordinating broker acting in connection with a proposed sale of shares of common stock by any selling stockholder. If we are notified by any selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares of common stock, if required, we will file a supplement to this prospectus. If the selling stockholders use this prospectus for any sale of the shares of common stock, they will be subject to the prospectus delivery requirements of the Securities Act.

In order to comply with the securities laws of some states, if applicable, the shares of common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the shares may not be sold unless they have been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares of our common stock in the market and to the activities of the selling stockholders. These rules may limit the timing of purchases and sales of the shares by such selling stockholders.

We are required to pay all fees and expenses incident to the registration of the shares. We have agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act.

We have agreed with each selling stockholder to keep the registration statement of which this prospectus constitutes a part effective with respect to its shares of our common stock until the earlier of (1) January 19, 2011, (2) the date on

which all shares purchased from us, or issuable upon exercise of warrants purchased from us, by such selling stockholders in the private placement may be resold during any 90-day period pursuant to Rule 144(k) of the Securities Act, or (3) the date on which all shares purchased from us, or issuable upon exercise of warrants purchased from us, by such selling stockholders have been resold.

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LEGAL MATTERS

Cooley Godward LLP, Five Palo Alto Square, 3000 El Camino Real, Palo Alto, California 94304 will pass upon the validity of the common stock being offered by this prospectus.

EXPERTS

The financial statements of Solexa, Inc. appearing in Solexa, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2004, have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their report thereon included therein and incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The financial statements of Solexa Limited appearing in Solexa, Inc.'s Amendment No. 1 to Current Report on Form 8-K/A, filed on May 20, 2005, have been audited by Ernst & Young LLP, Independent Auditors, as set forth in their report thereon included therein and incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

You should rely only on the information provided or incorporated by reference in this prospectus. We have authorized no one to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of the document.

We are a reporting company and we file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a resale registration statement on Form S-3 under the Securities Act to register the shares of common stock offered by this prospectus. However, this prospectus does not contain all of the information contained in the registration statement and the exhibits and schedules to the registration statement. For further information with respect to us and the securities offered under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You may read and copy the registration statement, as well as our reports, proxy statements and other information, at the SEC's public reference rooms at 450 Fifth Street, N.W., in Washington, DC. You can request copies of these documents by contacting the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for further information about the operation of the public reference rooms. Our SEC filings are also available at the SEC's website at www.sec.gov. In addition, you can read and copy our SEC filings at the office of the National Association of Securities Dealers, Inc. at 1735 K Street, N.W., Washington, D.C. 20006.

The SEC allows us to incorporate by reference the information contained in documents that we file with them, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below, any filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date we filed the registration statement of which this prospectus is a part and before the effective date of the registration statement and any future filings we will make with the SEC under those sections.

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The following documents are incorporated by reference into this document:

1. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2004, filed on March 31, 2005;
2. Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2005, filed on May 23, 2005;
3. Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2005, filed on August 22, 2005;
4. Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2005, filed on November 14, 2005;

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5. Our Current Report on Form 8-K, filed on January 3, 2005;
6. Our Current Report on Form 8-K, filed on January 10, 2005;
7. Our Current Report on Form 8-K, filed on March 7, 2005;
8. Our Current Report on Form 8-K, filed on March 29, 2005;
9. Our Current Report on Form 8-K, filed on April 8, 2005;
10. Our Current Report on Form 8-K, filed on April 26, 2005;
11. Our Current Report on Form 8-K, filed on May 11, 2005;
12. Our Current Report on Form 8-K/A, filed on May 20, 2005;
13. Our Current Report on Form 8-K, filed on May 23, 2005;
14. Our Current Report on Form 8-K, filed on June 9, 2005;
15. Our Current Report on Form 8-K, filed on June 28, 2005;
16. Our Current Report on Form 8-K, filed on July 15, 2005;
17. Our Current Report on Form 8-K, filed on September 12, 2005;
18. Our Current Report on Form 8-K, filed on November 23, 2005;
19. Our Current Report on Form 8-K, filed on November 29, 2005;
20. Our Current Report on Form 8-K, filed on January 23, 2006; and
21. The description of our common stock set forth in our registration statement on Form 10, as amended, filed on October 5, 1993.

We also incorporate by reference into this prospectus all documents filed by us with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement, and all documents filed by us with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act from the date of this prospectus but prior to the termination of the offering. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, as well as proxy statements.

Documents incorporated by reference are available from us, without charge. You may obtain documents incorporated by reference in this prospectus by requesting them in writing or by telephone at the following address:

Solexa, Inc.
25861 Industrial Blvd.
Hayward, California 94545
(510) 670-9300

Attn: Investor Relations

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

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WE HAVE NOT AUTHORIZED ANY DEALER, SALESPERSON OR OTHER PERSON TO GIVE ANY INFORMATION OR REPRESENT ANYTHING NOT CONTAINED IN THIS PROSPECTUS. YOU SHOULD RELY ONLY ON THE INFORMATION PROVIDED OR INCORPORATED BY REFERENCE IN THIS PROSPECTUS. YOU SHOULD NOT RELY ON ANY UNAUTHORIZED INFORMATION. THIS PROSPECTUS DOES NOT OFFER TO SELL OR BUY ANY SHARES IN ANY JURISDICTION IN WHICH IT IS UNLAWFUL. THE INFORMATION IN THIS PROSPECTUS IS CURRENT AS OF THE DATE ON THE COVER.

13,500,000 SHARES

SOLEXA, INC.

COMMON STOCK

PROSPECTUS

FEBRUARY 14, 2006