ASPIRA WOMEN'S HEALTH INC.

FORM 10-K
(Annual Report)

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K
ANNUAL REPORT UNDER SECTION 13 or 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2003**

OR

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

Commission file number: 000-31617

CIPHERGEN BIOSYSTEMS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**33-059-5156**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)

Ciphergen Biosystems, Inc.
6611 Dumbarton Circle
Fremont, CA 94555
(510) 505-2100
(Address, including zip code, of registrant's principal executive offices and telephone number, including area code)

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

Securities registered pursuant to Section 12(g) of the Act: Common Stock, $0.001 par value

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

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

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

The aggregate market value of voting stock held by non-affiliates of the Registrant was approximately $180.0 million as of June 30, 2003, based upon the closing price on the Nasdaq National Market reported for such date. This calculation does not reflect a determination that certain persons are affiliates of the Registrant for any other purpose. The number of shares outstanding of the Registrant's common stock on February 29, 2004 was 29,097,243 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its 2004 Annual Meeting of Stockholders (the "Proxy Statement"), to be filed with the Securities and Exchange Commission, are incorporated by reference into Part III of this Form 10-K Report.

CIPHERGEN BIOSYSTEMS, INC.
FORM 10-K
INDEX

			Page
PART I			1
	ITEM 1.	Business	1
	ITEM 2.	Properties	21
	ITEM 3.	Legal Proceedings	21
	ITEM 4.	Submission of Matters to a Vote of Security Holders	21
PART II			22
	ITEM 5.	Market for Registrant's Common Equity and Related Stockholder Matters and Issuer Purchases of Equity Securities	22
	ITEM 6.	Selected Financial Data	25
	ITEM 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	26
	ITEM 7A.	Quantitative and Qualitative Disclosures About Market Risks	50
	ITEM 8.	Financial Statements and Supplementary Data	52
	ITEM 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	79
	ITEM 9A.	Controls and Procedures	79
PART III			80
	ITEM 10.	Directors and Executive Officers of the Registrant	80
	ITEM 11.	Executive Compensation	80
	ITEM 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	80
	ITEM 13.	Certain Relationships and Related Transactions	80
	ITEM 14.	Principal Accountant Fees and Services	80
PART IV			81
	ITEM 15.	Exhibits, Financial Statement Schedules, and Reports on Form 8-K	81
		Signatures	84
		Power of Attorney	84

PART I

We have made statements under the captions "Business", "Management's Discussion and Analysis of Financial Condition and Results of Operations", "Factors That May Affect Our Results" and in other sections of this Form 10-K that are forward-looking statements. You can identify these statements by forward-looking words such as "may", "will", "expect", "intend", "anticipate", "believe", "estimate", "plan", "could", "should" and "continue" or similar words. These forward-looking statements may also use different phrases. We have based these forward-looking statements on our current expectations and projections about future events. Examples of forward-looking statements include statements about projections of our future results of operations and financial condition; anticipated deployment, capabilities and uses of our products and our product development activities and product innovations; the importance of proteomics as a major focus of biology research; the ability of our products to enable proteomics research; the rate of growth within the market for protein purification products; competition and consolidation in the markets in which we compete; increasing the size of our sales and marketing organization; existing and future collaborations and partnerships; our ability to operate and expand our Biomarker Discovery Center® laboratories and secure the commercial rights to biomarkers discovered at our Biomarker Discovery Center laboratories; the utility of biomarker discoveries and the effectiveness of our Biomarker Discovery Center laboratories; our ability to comply with applicable government regulations; our ability to expand and protect our intellectual

property portfolio; increasing the future sales volumes of consumables; increasing sales and marketing, and general and administrative costs; decreasing research and development costs; anticipated future losses; expected levels of capital expenditures; increased manufacturing efficiencies and a corresponding decline in cost of revenue as a percentage of revenue; the rating of our convertible notes and the value of the related put options; the period of time for which our existing financial resources and interest income will be sufficient to enable us to maintain current and planned operations; foreign currency exchange rate fluctuations; and the market risk of our investments.

These statements are subject to significant risks and uncertainties, including those identified in the section of this Form 10-K entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations—Factors That May Affect Our Results", and that could cause actual results to differ materially from those projected in such forward-looking statements due to various factors, including our ability to generate significant growth in unit sales while maintaining pricing; managing our manufacturing costs, operating expenses and cash resources consistent with our plans; our ability to conduct our ongoing new product development and product improvement activities within the budgets and time frames we have established; the ability of our ProteinChip® technology to discover protein biomarkers that have diagnostic, theranostic and/or drug development utility; the continued emergence of proteomics as a major focus of biological research and drug discovery; and our ability to protect and promote our proprietary technologies. We believe it is important to communicate our expectations to our investors. However, there may be events in the future that we are not able to accurately predict or that we do not fully control that could cause actual results to differ materially from those expressed or implied in our forward-looking statements.

ITEM 1. BUSINESS

Overview

We develop, manufacture and market our ProteinChip Systems, which use patented Surface Enhanced Laser Desorption/Ionization ("SELDI") technology. The ProteinChip Systems enable protein discovery, characterization and assay development to provide researchers with a better understanding of biological functions at the protein level. Protein characterization is the determination of the detailed identity of a protein, including its sequence as predicted by the corresponding gene and any chemical modifications introduced after the protein is produced. Assay development is the simplification and optimization of a set of procedures to develop a method for detecting and quantifying a specific

protein. Our ProteinChip Systems are novel, enabling tools in the emerging field of protein-based biology research, known as proteomics. While technological advances in DNA tools have substantially changed the field of genomics, the absence of enabling protein analysis tools has limited progress in proteomics research. Proteomics provides a direct approach to understanding the role of proteins in the biology of disease, monitoring disease progression and the therapeutic effects of drugs. We believe proteomics will be a major focus of biological research by enhancing the researcher's understanding of gene function and the molecular basis of disease. In May 1999, we commercially launched our ProteinChip Biology System.

We develop, manufacture and sell our ProteinChip System family of proteomics research equipment, which includes (i) the ProteinChip Biology System, a versatile system for protein analysis consisting of a ProteinChip Reader and ProteinChip Software; (ii) the ProteinChip Biomarker System, a system including Biomarker Patterns™ Software for advanced protein expression profiling; (iii) the ProteinChip AutoBiomarker System, a system including an Autoloader which automates array processing; (iv) the ProteinChip Tandem MS Interface for advanced identification work using tandem mass spectrometry; (v) automation accessories such as the Biomek® 2000 Workstation, which is manufactured by Beckman Coulter, and an Autoloader to facilitate sample handling and increase throughput; and (vi) other associated accessories. This equipment is used in conjunction with our ProteinChip Arrays, which are consumable biochips containing chemical or biochemical binding sites. In addition, we provide associated SELDI technology contract research services through our Biomarker Discovery Center laboratories to foster further adoption of our products and technology as an industry standard and to generate revenue by obtaining some combination of fees and commercial rights related to biomarkers discovered in our Biomarker Discovery Center laboratories in exchange for performing research services. We also develop, manufacture and sell chromatography sorbents for large-scale purification of proteins and are providing novel approaches to address process proteomics, an emerging market driven by pharmaceutical company demand to produce proteins for research, development and therapeutic manufacturing purposes.

In order to better serve the needs of our varied customers, in early 2004 Ciphergen formed a Biosystems Division and a Diagnostics Division. The Biosystems Division consists of (a) the Research Products Group, whose customers are clinical and basic research laboratories, and whose revenues are largely derived from sales of ProteinChip Systems, arrays and certain related services; and (b) the Bioprocess Products Group, whose customers are primarily those involved in the large-scale production of proteins, and whose revenues are largely derived from sales of BioSepra® sorbents as well as ProteinChip Systems, arrays and certain related services for process development and production. Ciphergen's Diagnostics Division is dedicated to the discovery of protein biomarkers and panels of biomarkers and the development of such biomarkers into protein molecular diagnostic tests that improve patient care. The Diagnostics Division provides collaborative research and development services through its Biomarker Discovery Center laboratories for biomarker discovery for use in new diagnostic tests, as well as pharmacoproteomic services for improved drug toxicology, efficacy and theranostic assays. While these divisions have been formed to focus on certain distinct customer needs, there is substantial overlap between the divisions as they share a common technology platform, and many of their research and development, manufacturing, sales and marketing activities are synergistic.

Ciphergen Biosystems, Inc. was originally incorporated in California on December 9, 1993 under the name Abiotic Systems. In March 1995, we changed our corporate name to Ciphergen Biosystems. On May 23, 2000, we reincorporated in Delaware. On July 31, 2001, we acquired BioSepra S.A., a wholly-owned subsidiary of Ciphergen located near Paris, France, which is principally engaged in the development, manufacture and marketing of process chromatography sorbents.

Ciphergen's revenue is derived from the sales of interrelated products and services on a worldwide basis. Although discrete components that earn revenues and incur expenses exist, significant expenses such as sales and marketing and corporate administration are not incurred by nor allocated to these

operating units but rather are employed by the entire enterprise. Additionally, the chief operating decision maker evaluates resource allocation not on a product or geographic basis, but rather on an enterprise-wide basis. Therefore, we have determined that we operate in only one reportable segment, which is the protein research tools and collaborative services business.

Industry Background

Genes are the hereditary coding system of living organisms. Genes encode proteins that are responsible for cellular functions. The study of genes and their functions has led to the discovery of new targets for drug development. The majority of drug targets are proteins, such as receptors, hormones and enzymes. Although genomics allows researchers to identify drug targets, it does not provide complete information on how these targets function within an organism. Industry sources estimate that within the human genome there are approximately 30,000 genes. The initial structure of a protein is determined by a single gene. The final structure of a protein is frequently altered by interactions with additional genes or proteins. These subsequent modifications result in hundreds of thousands of different proteins. In addition, proteins may interact with one another to form complex structures that are ultimately responsible for cellular functions.

Genomics allows researchers to establish the relationship between gene activity and disease. However, many diseases are manifested not at the genetic level, but at the protein level. The complete structure of modified proteins cannot be determined by reference to the encoding gene alone. Thus, while genomics provides some information about diseases, it does not provide a full understanding of disease processes.

The Relationship Between Proteins and Diseases

The entire genetic content of any organism, known as its genome, is encoded in strands of deoxyribonucleic acid, or DNA. Cells perform their normal biological functions through the genetic instructions encoded in their DNA, which results in the production of proteins. The process of producing proteins from DNA is known as gene expression or protein expression. Differences in living organisms result from variability in their genomes, which can affect the levels of gene expression. Each cell of an organism expresses only approximately 10% to 20% of the genome. The type of cell determines which genes are expressed and the amount of a particular protein produced. For example, liver cells produce different proteins from those produced by cells found in the heart, lungs, skin, etc. Proteins play a crucial role in virtually all biological processes, including transportation and storage of energy, immune protection, generation and transmission of nerve impulses and control of growth.

Diseases may be caused by a mutation of a gene that alters a protein directly or indirectly, or alters the gene's level of protein expression. These alterations interrupt the normal balance of proteins and create disease symptoms. A protein biomarker is a protein that is present in a greater or lesser amount in a disease state versus a normal condition. By studying changes in protein biomarkers, researchers may identify diseases prior to the appearance of physical symptoms. Researchers identify proteins by their molecular weight. In addition, researchers can utilize protein biomarkers to identify new disease pathways to be used as drug targets. Disease pathways are groups of interacting proteins that lead to disease if any one or more of the proteins is altered. Historically, researchers discovered protein biomarkers as a byproduct of basic biological disease research. This has resulted in the validation by researchers of approximately 200 protein biomarkers that are being used in commercially available clinical diagnostic products. The development of new diagnostic products has been limited by the complexity of disease states, which may be caused or characterized by several or many interacting proteins. Diagnostic products that are limited to the detection of a single protein may lack the ability to detect more complex diseases, and thus produce results that are unacceptable for practical use. Often the detection of patterns of multiple proteins has proved more useful. In recent years, the National Institutes of Health, or NIH, has recognized the importance of protein biomarkers in overcoming this

problem and their usefulness in the development of new diagnostic and therapeutic products. The NIH has established a grant program (The Early Detection Research Network) to fund the discovery and clinical validation of new protein biomarkers.

Limitations of Available Technologies for Proteomics Research and Protein Purification

Efforts to understand biology and to improve the diagnosis, monitoring and treatment of diseases have been dramatically enhanced through advancements in modern genomic technologies. These new technologies have formed the basis for the development of new analytical tools, which are primarily directed at DNA and genomic analysis, but are not applicable to protein research or proteomics. These new tools have accelerated the ability to sequence and analyze the human genome. Historically, researchers used gel electrophoresis as a primary tool for sequencing DNA. Gel electrophoresis measures how far a DNA fragment migrates through the pores of gels in response to an applied electric field over a fixed time interval. Electrophoresis is a time-consuming, manual process that requires large amounts of pure DNA to be useful. The development of polymerase chain reaction, or PCR, allowed researchers to amplify, or produce multiple copies of, a fragment of DNA. Researchers could then enhance the signal of trace amounts of DNA from an unprocessed biological sample, such as tissue or blood, to a level where measurement was possible. Successive advances in technologies have produced faster, automated sequencing machines and new, biochip-based technologies. These new technologies have dramatically improved the throughput and accuracy of DNA analysis. In addition, these new technologies have reduced costs by increasing automation and reducing necessary labor.

Although recent technological advances have benefited genomics, there have been fewer significant advances in proteomics. While DNA has been relatively simple to study because of its ease of detection and linear structure, protein analysis has been a far more difficult challenge. The goal of proteomics is to determine the structure and function of proteins. Researchers use techniques such as tagging, amplification and sequencing to analyze DNA, but researchers cannot use these techniques effectively to study proteins. These techniques can change the structure of proteins and may change their characteristics or function, which would limit researchers' ability to identify and analyze samples. In addition, these techniques do not allow researchers to monitor or study how proteins interact, or to identify which proteins interact together, to perform biological functions.

Currently, researchers perform proteomics research using gel electrophoresis and other protein purification and analysis products. These tools require substantial, labor-intensive sample preparation processes to enable researchers to produce enough purified proteins before identification and analysis can occur. In addition, these tools must be operated by researchers with substantial technical expertise. As a result, proteomics research has not advanced at a rate comparable to that of genomics. New tools are needed that are specifically designed to allow researchers to analyze proteins to enable protein biomarker discovery, to fully understand biological pathways and function, and ultimately to accelerate the discovery of new drugs and clinical diagnostics. Moreover, there is a bottleneck in the rapid purification of proteins from either native biological sources or from "gene to protein" biologically-manufactured proteins. Scientists must obtain proteins of interest from such sources in large quantities for basic research studies, drug discovery and development. In addition, the increasing number of biological therapeutics and monoclonal antibodies in clinical trials and in pre-clinical development is creating a shortage in production capacity for such products and an increased need to improve large-scale purification methods. Thus, there is a rapidly growing market for protein purification products extending from benchtop research to large-scale manufacturing.

The Ciphergen Solution

We develop, manufacture and market our ProteinChip Systems, which use patented Surface-Enhanced Laser Desorption/Ionization ("SELDI") technology. The ProteinChip Systems enable protein biomarker discovery, characterization and assay development. Our ProteinChip Systems integrate the

key steps of proteomics research on a single, miniaturized biochip. Our ProteinChip Systems incorporate SELDI technology on the surface of a consumable biochip, which allows researchers to capture and analyze proteins directly. Our ProteinChip Systems enable rapid, reproducible, on-chip protein expression and protein analysis from complex biological samples, such as whole blood, tissue or saliva, without separation, tagging and amplification processes and with minimal prior purification. SELDI enables protein detection and quantification by reducing signals from unwanted biomolecules that would otherwise obscure the measurement results.

We believe our ProteinChip Systems enable researchers to identify and quantify proteins by direct molecular weight detection and measurement. Researchers can add chemicals or enzymes at any step during the process to greatly enhance the detailed knowledge gained from a set of experiments. We believe the integration of these processes enables a researcher to rapidly discover, characterize and assay proteins directly from biological samples, providing a novel technique for protein discovery and analysis compared to currently available methods. We provide these capabilities to our customers by selling them our ProteinChip Systems and/or our Biomarker Discovery Center collaboration services. We believe our ProteinChip Systems can enable protein research in the following areas:

- *Differential Protein Expression.* Our ProteinChip Systems are designed to enable biology researchers to rapidly conduct studies in differential protein expression. Differential protein expression is the comparison of proteins expressed in different, usually related, biological samples, such as blood serum from a diseased individual and blood serum from an individual without that disease. The differences include both differences in the identities of the collection of proteins present in the samples, and differences in the amounts of a particular protein present in both samples. Proteins that are either present in one sample and absent in the other, or present at different relative levels in both samples, are potential protein biomarkers of the disease. Further research may validate the use of potential protein biomarkers for the diagnosis of the disease or as targets for the discovery of drugs to treat the disease. In addition, the information derived from our ProteinChip Systems enables scientists to compare genetic message information derived from DNA biochips, or miniaturized biochips containing DNA, to protein information, in order to better define protein function. Expression studies and protein discovery that previously were impossible to conduct or took months or years can be performed on our ProteinChip Systems in days or even hours. By quickly analyzing statistically significant numbers

of samples, biomarker candidates can be validated. Researchers can use quantitative assays of proteins developed from differential protein expression to diagnose and monitor disease.

- *Protein Characterization.* Once a potential protein biomarker is identified, a usual next step is the characterization of the protein. Protein characterization is the process of determining the identity of the protein and/or characterizing aspects of its physical structure. Using our ProteinChip Systems, biology researchers can purify a rare protein from a crude biological sample in hours, a process that required days or weeks with traditional methods. Researchers can then determine the identity of the protein. This process can involve, for example, determining a fragment pattern for the protein (produced, for example, by treatment with enzymes) with our ProteinChip Systems, and comparing this pattern with fragment patterns of proteins identified in publicly available protein and genomic databases. Based on this comparison, the researcher may be able to identify the protein in the database that corresponds to the experimental protein. Identifying a protein can provide the researcher with information useful in understanding the biology of the sample being studied. Identifying the gene from which the protein originates can provide useful structural or processing information. Also, researchers can characterize aspects of the physical structure of a protein using our ProteinChip Systems to perform enzymatic-, chemical- or antibody-based tests or assays. Such assays may reveal, for example, whether the protein has been modified after production. Protein modification can indicate changes in protein function, which may be important to the particular disease under study.

- *Quantitative Assay of Proteins and Protein Interactions.* Once a protein biomarker has been identified and characterized, the researcher may want to develop assays based on the protein. One such assay is the routine detection of the protein and determination of its amount in a sample. This is a quantitative assay. It is useful, for example, in diagnostic assays for the severity or stage of a disease. Another assay is a test of protein interactions between the biomarker and other proteins. This assay is useful in tests of the biological function of the protein that may be important for its role in disease. This assay is also useful in drug discovery to identify drug candidates that interfere with protein interaction. Our ProteinChip Systems enable the researcher to perform quantitative and protein interaction assays by selecting a limited number of chemical or biochemical surfaces and optimizing the conditions for a particular type of assay. We believe assay simplification will speed functional validation of discovered biomarkers for both diagnostic and drug discovery applications. Currently, researchers take many weeks or months to accomplish this process using conventional technologies. We believe our ProteinChip technology can reduce this process to days or even hours.

- *Novel, High-Speed Protein Purification and Production.* Researchers seek rapid purification of proteins from either native biological sources or from "gene to protein" biologically manufactured proteins in order to conduct basic research. Drug developers need to obtain large quantities of proteins of interest for target discovery, validation and large-scale production of therapeutics. Ciphergen's ProteinChip Systems, through the application of gradient wash conditions to the chromatographic surfaces of these arrays, which produces a step-wise elution of retained compounds, may allow "on-chip" optimization and purification of proteins in hours or days versus weeks or months using existing methodologies. The "on-chip" optimization method is akin to that accomplished while utilizing columns for liquid chromatography separations but the method allows for purification using only microliters of biological sample versus milliliters of biological sample, and it is thus particularly useful as "predictive protein chromatography" in large-scale production. Ciphergen's new method of purity analysis is called ProteinChip Retentate Chromatography—Mass Spectrometry ("RC-MS"). Ciphergen also offers sorbents and chromatography products and services in the application of "predictive protein chromatography" or scaling up of the "on-chip" optimization and purification process achieved using RC-MS.

Our Market Opportunity

There are several types of laboratories that perform proteomics research and development. We believe our ProteinChip System, chromatography products and Biomarker Discovery Center collaboration services can enable proteomics research in the following markets:

- *Basic Biology Research.* Basic biology research laboratories focus on the study of general biological processes and the understanding of the molecular basis of disease. Most of the techniques used by researchers in basic biology research to study proteins are labor intensive or have limited analytical capabilities. We believe that the ease of use and problem-solving versatility of our ProteinChip Systems may enable biologists to perform proteomics research at their workstations in the laboratory.

- *Clinical Research.* Clinical research is focused on associating clinical disease symptoms to changes in certain proteins in the disease state versus in the normal state. In doing so, researchers seek to identify markers, many of which are proteins, or patterns of multiple markers that can be used to diagnose diseases early, assess treatment response and monitor treatment progress. Currently, physicians pursuing clinical research lack a flexible, integrated, standardized tool to perform protein biomarker discovery. We believe that our ProteinChip Systems and collaborative services may enable researchers to rapidly discover protein biomarkers and to develop these biomarkers into clinical diagnostic tests. Through our Diagnostics Division, we are pursuing the development of such diagnostic tests.

- *Pharmaceutical Drug Research and Development.* A current bottleneck in drug research is secondary screening, during which drug lead candidates are validated by researchers using complex biological assays in which markers are used to assess biological responses to varying compounds, dose levels and conditions. Current assay systems often have poor specificity, are usually labor intensive and require substantial development time. In addition, it is estimated that approximately 25% of drug development failures now occur in toxicology, or the study of the negative or harmful effects of a drug, in which the availability of useful data is hampered by similar issues. We believe a lack of protein biomarkers currently limits the ability of researchers to adequately evaluate drug target function, cell pathway analysis and toxicological and therapeutic effects throughout the drug development process. We believe our ProteinChip Systems and collaborative services can substantially improve preclinical development and clinical trial effectiveness by greatly expanding the use of protein biomarkers.

- *Pharmaceutical Production Process.* Another current bottleneck appears in drug development and production. The most popular current method for preparative separation of proteins is liquid chromatography ("LC"). In LC, solid sorbents, which have complementary physicochemical properties to proteins of interest, are employed for selective adsorption. To design an LC protein separation process is not a trivial operation, however, but rather a relatively long and systematic task built essentially on a trial and error approach. The application of our ProteinChip System—the RC-MS method—is a rapid alternative method that consumes minimal sample yet predicts optimal separation conditions for large-scale LC purification of proteins from complex biological matrices. Furthermore, we can offer our process chromatography products and services in the actual large-scale application of the preparative protein separation conditions as determined using our ProteinChip Systems.

- *Diagnostics.* The in vitro diagnostics industry consists of approximately 200 immunoassay tests, which principally consist of single protein biomarkers. Diagnostic assays that are limited to the detection of a single protein often have limitations in clinical specificity (true positives) and sensitivity (true negatives) due to the complex nature of many diseases and the inherent biological diversity among populations of people. Over the last several years, we have been pursuing the discovery of panels of biomarkers that may yield improved clinical predictivity and utility, and have formed a Diagnostics Division to develop these potential assays.

Business Strategy

We intend to establish our ProteinChip Systems as an enabling technology platform for protein biomarker discovery and proteomics research in the basic biological research, clinical research, and pharmaceutical drug discovery and development process markets, and as an assay platform in the in vitro diagnostics market. Key elements of our strategy are to:

- *Accelerate Awareness and Acceptance of Our ProteinChip Systems.* We intend to focus on expanding the installed base of our ProteinChip Systems with leading academic, government, pharmaceutical and clinical research laboratories to promote awareness and acceptance of our technology. In addition, we will support the use of our ProteinChip Systems through customer education and training as well as customer collaborations, such as those with Pfizer and Novartis, to increase the applications and use of our ProteinChip Arrays. Further, we intend to pursue commercialization of our products through our own sales and marketing organization in North America, Western Europe, Japan and China, and through distributors or sales representatives in selected other parts of the world, including Australia, Malaysia, New Zealand, Singapore, South Korea and Taiwan.

- *Expand Product Development and Innovation.* We intend to expand the scope of our product portfolio by continuously developing new products and applications based on our ProteinChip technology. We believe that by expanding the applications of our technology and products and

increasing their functionality, we will promote the use and acceptance of our ProteinChip Systems by biology researchers. The ProteinChip products we are currently attempting to develop include higher performance proteomics systems and easier to use versions of our proteomics systems that can be widely used by researchers in the laboratory. Recent examples of new products and applications introduced in 2003 include our Interaction Discovery Mapping™ platform for protein interaction studies on ProteinChip Systems, ProteinChip SEND arrays which eliminate the need for matrix and provide enhanced low molecular weight detection, and the CiphergenExpress™ database for automated biomarker discovery, validation and assay on ProteinChip Systems.

- *Expand into the Process Proteomics Market.* We intend to leverage the use of RC-MS and ProteinChip Systems to promote the sale of our chromatography sorbents for large-scale purification of proteins. Ciphergen and BioSepra have integrated their sales and marketing organizations and are offering a line of products to address process proteomics, an emerging market driven by pharmaceutical company demand to produce proteins for research, development and therapeutic manufacturing purposes.

- *Establish and Operate Biomarker Discovery Center Laboratories.* Both directly and through partnerships, we intend to continue establishing and operating our Biomarker Discovery Center laboratories, which provide SELDI technology-based research services. By performing contract research projects and engaging in research collaborations, we intend not only to foster

further adoption of our products and technology as an industry standard, but also to generate revenue by obtaining some combination of fees and commercial rights related to biomarkers discovered in our Biomarker Discovery Center laboratories in exchange for performing research services. We believe that these biomarker discoveries may have diagnostic and/or therapeutic utility. We also believe that our Biomarker Discovery Center laboratories may accelerate biomarker discovery and validation in both pharmaceutical drug discovery, toxicology and clinical trials, and in clinical research laboratories. We plan to deploy the prototypes of our latest technology and protocols to maintain and extend a technological advantage in our Biomarker Discovery Center laboratories. Examples of research collaborations being conducted through our Biomarker Discovery Center laboratories include HIV research with the Aaron Diamond AIDS Research Center, cancer research with Novartis, and pulmonary disease research with Pfizer.

- *Enter the Diagnostics Market with Proprietary Assays.* For the last several years, Ciphergen has been discovering and filing patents on biomarkers and patterns of biomarkers that are associated with various diseases and other pathologic states. Initial areas of focus have included various cancers as well as neurological, cardiovascular and infectious diseases. The clinical questions we have been researching include early detection, treatment response, monitoring of disease progression, prognosis and others. We recently formed a Diagnostics Division, whose principal goal is to develop certain of these biomarker discoveries into assays delivered on the ProteinChip platform that could be used to improve patient care.

- *Expand Our Intellectual Property Portfolio.* We include many issued, allowed and pending patents on the SELDI technology, ProteinChip Systems, Arrays and Software, and chromotography sorbents in our current patent portfolio, and intend to expand this portfolio in several areas of technology related to our business, including applications of SELDI technology, biomarker discoveries and sorbent technology. We intend to continue to develop our proprietary technologies and proprietary infrastructure in support of our existing SELDI technology and chromotography sorbents. For example, we intend to develop new surface chemistries for our ProteinChip Arrays, enhancements to our ProteinChip Readers and advances in our analysis and database ProteinChip Software, in order to broaden the range of applications and opportunities that researchers can address. We intend to continue to license and acquire technologies from

others that complement our core capabilities and to protect our proprietary technologies with patents and trade secrets.

Our ProteinChip Technology

Our ProteinChip technology is based on SELDI, which combines laser-based molecular weight detection with the use of a chemically or biochemically active biochip array surface constructed from proprietary-treated metal. Our ProteinChip technology enables researchers to apply a crude biological sample, such as whole blood or tissue, directly to the surface of a ProteinChip Array. These ProteinChip Arrays are designed to select desired proteins from the sample through affinity capture, which employs chemical processes or biochemical targets such as receptors, antibodies or DNA probes. Researchers then wash away the remainder of the unused sample with a variety of solutions with varying stringency conditions, depending on the type of test performed. This enhances the signal of the proteins of interest on the biochip by reducing signals from unwanted biomolecules that would otherwise obscure the measurement results. The purified sample proteins remain evenly distributed on the surface of the ProteinChip Array. This even distribution allows the researcher to accurately measure and quantify the proteins.

The researcher then places the ProteinChip Array in a specially developed laser-based, molecular weight detection analyzer, or ProteinChip Reader. The ProteinChip Reader uses a laser beam to release the retained proteins from the ProteinChip Array surface. The ProteinChip Reader accelerates the retained proteins and guides them through a flight tube under vacuum to a detector. The time of this flight is directly related to the exact molecular weight of each protein. This process allows the molecular weight of a sample protein to be determined by the researcher.

The researcher generates protein expression profiles by examining the samples collected with different affinity-based ProteinChip Arrays or different stringency washes, and collecting the information under the different conditions. Using our ProteinChip Systems, researchers can compare protein expression profiles from different samples, such as disease versus normal states, and display differences in the proteins expressed. Proteins that are differently expressed in the disease versus normal state may be new, potentially relevant protein biomarkers. Researchers can then process proteins of interest on-chip to:

- obtain sequence identification;
- detect secondary modifications of proteins;
- identify protein interactions;
- quantitatively measure protein concentrations; and
- perform assays.

Our ProteinChip Systems and Related Products

Ciphergen's *ProteinChip Systems* are fully integrated platforms consisting of a ProteinChip Reader to read ProteinChip Arrays and our proprietary ProteinChip Software to analyze and manage protein-based information.

The ProteinChip Reader is a laser-based, molecular weight detection system designed for use with consumable ProteinChip Arrays, which are biochips containing chemical or biochemical binding sites. We designed our ProteinChip Reader to be used in the laboratory by basic biology researchers. Our ProteinChip Reader consists of a nitrogen laser, high-speed digital electronics, a vacuum system and a standard personal computer with our proprietary ProteinChip Software for system control and data analysis.

Our ProteinChip Software is designed to facilitate system operation by biology researchers with no experience in molecular detection systems and minimal experience in protein analysis. The software

allows fully automated operation of the ProteinChip Systems with graphic data presentation and analysis readouts in familiar formats for the biologist, such as those displayed by gel electrophoresis systems. Our ProteinChip Software enables differential protein expression analysis by automatically comparing protein profiles and highlighting differences in protein expression. Our ProteinChip Software provides researchers with Internet access for rapid database searches, which facilitates protein identification. Furthermore, our ProteinChip Software allows researchers to perform quantitative protein interaction assays.

In May 1999, we commercially launched the ProteinChip System, Series PBS II, which we now refer to as the ProteinChip Biology System. In December 2001, we announced the introduction of the ProteinChip Biomarker System which extends the capability of a ProteinChip Biology System by incorporating Biomarker Patterns™ Software and ready-to-use profiling kits. The system is designed for advanced protein expression profiling and serves as a versatile clinical proteomics platform for scientists in clinical disease and toxicological research, pharmaceutical research and development, and clinical diagnostics. In October 2002, we introduced the ProteinChip AutoBiomarker System, which consists of a ProteinChip Biomarker System, a ProteinChip Autoloader and a Biomek® 2000 Workstation, to increase sample throughput and automate the reading of arrays.

Our *ProteinChip Arrays* are typically used by researchers for protein expression profiling, characterization and quantitative protein interaction applications. Our ProteinChip Arrays consist of a metal surface with multiple sample spots. We treat these spots with our proprietary coatings that are designed to capture certain families of proteins. We offer two standard types of ProteinChip Arrays. One type has ready-to-use chemical surfaces. This type is particularly useful in performing differential protein expression. The other type has pre-activated surfaces that customers use to make their own customized biochemical surfaces. This type is particularly useful in protein interaction studies. We are not required to customize our ProteinChip Arrays to meet client specifications. Researchers use both types of ProteinChip Arrays to perform protein identification and characterization.

Our *Biomarker Patterns Software* is designed to automate pattern recognition-based statistical analysis methods to correlate protein expression patterns from clinical samples with disease phenotypes. This multivariate data analysis software solution addresses a key component of the biomarker discovery process. A major benefit of the ProteinChip platform is in the discovery and correlation of multiple biomarkers in a population of samples to rapidly validate clinical, toxicological and cell pathway pathology. As was the case in the development of DNA array technology, the flood of data produced by the instrument makes informatics tools critical to interpreting the results. This software package combined with an updated "Biomarker Wizard" module in the core ProteinChip Software package automatically identifies multiple protein peaks that correlate with phenotype differences between samples.

CiphergenExpress™ DataManager is a new software offering that provides a client-server, relational database system for management and analysis of ProteinChip System data. High throughput collection and analysis of multi-dimensional SELDI data requires managing data related to samples, ProteinChip Arrays, reagents and spectra. To meet this need, CiphergenExpress DataManager provides advanced data handling, data mining and analysis capabilities to allow rapid, automated analysis of multiple experiments over multiple conditions to identify potential biomarkers.

Our *ProteinChip Tandem MS Interface* was introduced in May 2001. The ProteinChip Tandem MS Interface can be affixed to certain tandem mass spectrometers and thereby allow a researcher to gather data regarding a biological sample using both ProteinChip Arrays and tandem mass spectrometry. The ProteinChip Tandem MS Interface allows for biochip-based identification studies, epitope and phosphorylation mapping, and protein interaction analyses with a tandem mass spectrometer.

A customized version of Beckman Coulter's *Biomek 2000 Workstation* was first sold by us in late 2001. Available exclusively through Ciphergen, the Biomek 2000 is a device that automates liquid

handling when used in combination with Ciphergen's 96-well and 192-well ProteinChip Array processors. Sample throughput can be increased

five-fold or more while improving reproducibility using this robotic accessory. In addition, the Biomek 2000 can be used to perform sample fractionation procedures prior to chip binding, thus increasing the number of proteins detected from each sample.

In addition, we offer a number of related accessories, such as bioprocessors, reagents, spin columns and assorted kits designed for proteomics research.

ProteinChip Systems and related products contributed approximately 75%, 62%, and 61% of revenue in 2001, 2002 and 2003, respectively.

Our Bioprocess Products

Ciphergen's Bioprocess Products Group has core technical competencies in the area of composite (organic and inorganic) material and biological separation sciences. For over 25 years, BioSepra has focused this expertise on the development and use of chromatographic sorbents for large-scale manufacturing of natural and recombinant proteins, vaccines and antibodies. BioSepra's composite chromatography sorbents combine very rigid and stable base materials with high binding efficiency hydrogels to yield products that are physically strong and chemically stable with high binding capacity and excellent separation properties. These unique composite sorbents enable biopharmaceutical manufacturers to produce biological drugs more quickly, reduce operational costs and improve product quality. The broad technology base on which these sorbents are based also allows functionalization for a wide variety of applications.

Among the most recent and promising technologies within the Bioprocess Products Group's product offerings are industrial sorbents based on the use of dual-mode and mixed-mode interactions and "affinity" ligands. The application of these technologies makes it possible to develop unique separation mechanisms, which can give customers highly efficient alternatives to traditional methods. We recently completed the development of promising new technologies for antibody purification and expanded bed chromatography for the capture of target molecules from unclarified feed streams. Additional complementary technologies are being studied to complete the set of modern separation tools devoted to downstream processing. These include approaches for process development combining chips and beads along with selectivity screening methods.

Ciphergen's Bioprocess Products Group has a wide range of products suitable for biopharmaceutical production. Many of our sorbent brands such as Spherosil®, Spherodex®, Trisacryl®, Ultrogel®, HyperD® and HyperCel® are currently used in the clinical production of biopharmaceuticals, including full-scale manufacturing of FDA-registered products in both North America and Europe. We have been able to combine chromatography development expertise with SELDI-based ProteinChip technology to begin a new approach to protein purification called "process proteomics". This new approach combines the previously separate operations of purification optimization and protein analysis. This single-step, on-chip approach offers the potential to dramatically accelerate and simplify purification development and analysis.

Our process chromatography sorbents and related process proteomics services contributed approximately 14%, 26% and 25% of revenue in 2001, 2002 and 2003, respectively.

Diagnostics Division

Ciphergen's Diagnostics Division is dedicated to the discovery of protein biomarkers and panels of biomarkers, and their development into protein molecular diagnostic tests that improve patient care. We also provide collaborative research and development services through our Biomarker Discovery Center laboratories for biomarker discovery for new diagnostic tests, as well as pharmacoproteomic services for improved drug toxicology, efficacy and theranostic assays.

Beginning in 2000, we established the first of a series of Biomarker Discovery Center laboratories and established a major research collaboration with the Johns Hopkins University School of Medicine with the intention of employing the ProteinChip technology to discover biomarkers and develop assays based on panels of biomarkers, which might have greater predictive power than single marker tests. We believe that biomarkers and their use in diagnostics are patentable. While many of our initial diagnostic research efforts have focused on the early detection of various cancers, we also have active discovery programs underway for neurological, cardiovascular, infectious, and other diseases. These programs are designed to address a variety of clinical questions including early detection, disease treatment response, monitoring, classification and prognosis.

Our most advanced research project is in the field of oncology. During 2003, we and our collaborators at the Johns Hopkins University School of Medicine completed a multi-site study employing over 500 patient serum samples, in which a multi-marker panel was identified that may have utility in the detection of ovarian cancer, particularly with respect to early stage cancer where early detection has been shown to dramatically improve patient survivability. This study also led to the discovery of several interacting proteins that may provide additional diagnostic information, allowing us to pursue new avenues for assay improvement and obtain further understanding of the biological pathways in ovarian cancer. We have now commenced a validation study using over 1,000 samples obtained from multiple sites around the world.

If we are successful at discovering biomarkers and panels of biomarkers that have diagnostic utility, our commercialization strategy includes partnering with other parties to assist in the development and commercialization of our initial tests. Potential partners could include

clinical reference laboratories and/or traditional in vitro diagnostic companies with the infrastructure in place to commercialize such tests.

We believe our Biomarker Discovery Center laboratories, which provide SELDI technology-based research services, and which we are operating directly and through partnerships and client relationships, can foster further adoption of our products and technology as an industry standard and generate revenue by obtaining some combination of fees and commercial rights related to biomarkers discovered in our Biomarker Discovery Center laboratories in exchange for performing research services. We intend to discover and characterize new protein biomarkers and patterns of biomarkers from biological samples provided by our current and future collaborators. We believe that our Biomarker Discovery Center laboratories may accelerate biomarker and biomarker pattern discovery and validation in pharmaceutical drug discovery, toxicology and clinical trials, and clinical research laboratories. We intend to deploy the prototypes of each next-generation ProteinChip System and other specialized equipment, software and protocols to maintain and extend a technological advantage in our Biomarker Discovery Center laboratories.

Our Biomarker Discovery Center laboratories have established project contracts with the Johns Hopkins University School of Medicine, the Prostate Cancer Center at Eastern Virginia Medical School, the Aaron Diamond AIDS Research Center, University Health Network (Canada) and other academic and government institutions, commercial biotechnology companies and pharmaceutical companies, including Biosite, Pfizer and Novartis. These project contracts specify the types of samples that will be analyzed, outline the work to be done, and specify a fee and/or license rights for discoveries arising from the projects. We have commercialization rights to certain defined discoveries under many of these collaborations.

Our Biomarker Discovery Center laboratories perform agreed-upon analyses of customer samples in order to either discover biomarkers and biomarker patterns for a variety of differential classification and predictive purposes, or sequence particular proteins to obtain a probability of match between known and unknown proteins, or a determination that the protein has not been previously identified. The terms of a project contract include a fee payable to us for a specified analysis plan on a defined sample set and generally include a license to us for medical uses of biomarkers discovered in such

projects. We cannot currently estimate the commercial significance of rights to biomarkers that we may acquire. We expect that our Biomarker Discovery Center laboratories will extend the analysis capabilities of our customers, thereby increasing awareness of the range of our technologies and thus increasing sales of our ProteinChip Systems.

While most of our Biomarker Discovery Center contracts are fee-for-services arrangements, we entered into an agreement with the Israel-U.S. Binational Industrial Research and Development Foundation ("BIRD"), which provided funding for research we were undertaking with Mindsense Biosystems, Ltd., using our SELDI technology to discover potential biomarkers for the diagnosis and monitoring of major depression. Our funding from BIRD ended in 2003. Revenue from the BIRD grant totaled $128,000 in 2001, $129,000 in 2002 and $106,000 in 2003.

We sponsor research at various institutions, including Johns Hopkins University and the Eastern Virginia Medical School. We spent approximately $1.1 million in 2001, $1.3 million in 2002 and $1.2 million in 2003 in the form of cash, equipment and consumables on such sponsored research.

We lease facilities for our Biomarker Discovery Center laboratories in Copenhagen, Denmark, in Malvern, Pennsylvania, in Yokohama, Japan and as part of our headquarters facility in Fremont, California. We have hired managerial and scientific staff for these facilities and will evaluate the establishment of additional Biomarker Discovery Center laboratories in the future. We also provide financial and technical support for a Biomarker Discovery Center laboratory at the Johns Hopkins University School of Medicine.

Sales and Marketing

We utilize a direct sales force in North America, Western Europe, Japan and China. Our sales process involves on-site applications problem-solving, scientific publications, product demonstrations, seminars, exhibits, conventions and meetings, word of mouth, direct mail, advertising and the Internet. We have designed our sales process to increase market awareness of our ProteinChip Systems, Biomarker Discovery Center services and chromatography sorbents, and promote acceptance of our products and services.

Our sales force includes program managers, who all have sales experience, and field research scientists, most of whom have Ph.D. degrees in biology or biochemistry. Generally each program manager works with a team of one to three field scientists. The primary responsibility of the program manager is to manage sales efforts. The primary responsibility of the field research scientist is to provide solutions to biological problems for our customers and sales prospects through applications development, scientific seminars, joint scientific publications with customers and product demonstrations. In addition, the field research scientists serve as our primary field representatives for after-sales customer service and technical support. As of February 29, 2004, we had 32 program managers and 43 field research scientists.

We formed Ciphergen Biosystems KK in Japan in January 1999 as a joint venture with Sumitomo Corporation to distribute our products in Japan. The joint venture agreement is for ten years from January 1999. We originally invested $315,000 for 30% of Ciphergen Biosystems KK. In March 1999, we signed a distribution and marketing agreement granting Ciphergen Biosystems KK the exclusive right to distribute our products in Japan for ten years, and we were paid $315,000 by Ciphergen Biosystems KK. In August 2002, we exercised our right to purchase an

additional 40% at a cost of approximately $446,000, not including cash recorded from the resulting business consolidation, bringing our ownership interest in Ciphergen Biosystems KK to 70%. We are responsible for providing Ciphergen Biosystems KK with its working capital.

We have also established relationships with distributors who cover Australia, Malaysia, New Zealand, Singapore, South Korea and Taiwan.

Our sales and marketing organization as of February 29, 2004 consisted of 144 employees, 68 of whom have Ph.D. or M.D. degrees. We intend to increase the size of our sales and marketing organization in North America, Western Europe, Japan and China over the next 12 months.

Geographic Information

Information about the geographies in which we operate can be found in Part II, Item 8 of this Form 10-K in the Notes to Consolidated Financial Statements at Note 19, "Segment Information and Geographic Data."

Existing Customers

The following is a partial list of our customers, several of which have multiple ProteinChip Systems.

Pharmaceutical and Biotechnology	Academic and Government
Abbott Laboratories	Aaron Diamond AIDS Research Center
Abgenix	Academic Medical Center of Amsterdam
Amgen	Brigham and Women's Hospital
AstraZeneca	Brown University
Aventis	Burnham Institute
BASF	Children's Hospital of Philadelphia
Bayer	Cornell Medical School
Becton Dickinson	Dana Farber Cancer Center
Bristol-Myers Squibb	Duke Medical School
Boehringer Ingelheim	Emory University
Centocor	Harvard School of Public Health
Cephalon	Imperial Cancer Research Foundation
DSM Biologics	Imperial College Prion Unit
Eli Lilly	Indiana University-Purdue University
Genentech	INSERM
Genetics Institute	International Medical Center-Japan
GlaxoSmithKline	Johns Hopkins University School of Medicine
Human Genome Sciences	Lawrence Livermore National Laboratories
Innogenetics	Massachusetts General Hospital
Janssen Pharmaceuticals	Massachusetts Institute of Technology
Johnson & Johnson	McGill University
MDS Pharma	MD Anderson Cancer Center
MediGene	Medical College of Georgia
Merck	Medical Research Council (Cambridge)
Mitsubishi Welpharma	Mount Sinai Medical School
Neurochem	National Cancer Center-Japan
Neurogenetics	National Institutes of Health, National Cancer Institute
Novartis	Osaka University
Novo Nordisk	Pasteur Institute
Orion Pharmaceuticals	Riken Brain Science Institute
Pfizer	Rockefeller University
Pharmacia	Royal Free Hospital
Proctor & Gamble	Rutgers University
Purdue Pharmaceuticals	Stanford University
Quest Diagnostics	Thrombosis Research Institute
Roche	Tokyo University
Sankyo	University of Arizona
Schering-Plough	University of California, Los Angeles
Serono	University of California, San Francisco
Sumitomo Pharmaceuticals	University of Notre Dame
Syngenta	University of Southern California
Takeda Chemical	University of Uppsala
Tanabe Pharmaceuticals	US EPA

Wyeth
Yamanouchi Pharmaceuticals
Virginia Prostate Center
Wright State University

No customer accounted for more than 10% of our revenue in 2001, 2002 or 2003.

Research and Development

Our ProteinChip System is a single technology platform, which we believe can be easily optimized for use in many markets. This flexibility allows us to rapidly introduce new applications and products that can be transferred from one field to another. We have ongoing technology development programs for our ProteinChip Arrays, materials, surface chemistries, high-density biochip formats and manufacturing processes. In applied research, we are developing new applications in differential protein expression, quantitative protein interaction assays and protein characterization. Research and development efforts related to our ProteinChip Readers include research in high-sensitivity detection and quantitation, as well as improvement in system resolution and mass accuracy. We are also developing new SELDI-based accessories for high resolution, tandem mass spectrometry, whose capabilities will further enhance our ProteinChip Systems. We have worked on improvements to the ProteinChip Tandem MS Interface to increase sensitivity significantly when compared to other laser desorption/ionization ("LDI") Qq-TOF devices. We introduced new matrices for LDI Qq-TOF analysis to extend the utility of this approach. In addition, we have ongoing software development projects to further improve the functionality, expand the applications, and strengthen the data management capabilities of our ProteinChip System.

The acquisition of BioSepra and its related technologies has further allowed us to pursue new chemistry developments. Our research and development efforts have included demonstrations that proteins retained on our ProteinChip Arrays with certain chemistries and surfaces resemble the ones isolated using beads. We seek to promote and improve the prediction of ion exchange separation chromatography conditions using our ProteinChip Systems. We are also working on new developments associating beads and biochips, not only for prefractionation of proteins, but also for improved protein-protein interaction applications.

In addition to pursuing research and development related to our research tools business, our Diagnostics Division is using our Biomarker Discovery Center laboratories to attempt to discover protein biomarkers or patterns of biomarkers that may have diagnostic and/or therapeutic utility, and to develop them into assays.

Manufacturing

We design, manufacture and distribute ProteinChip Systems and Arrays, including related instrumentation, consumables, accessories and software, at our Fremont, California facility, which is registered under ISO 9001:2000. For certain components of our ProteinChip Systems, we rely upon suppliers, including Stanford Research Systems, which also performs specified design services for certain components of our ProteinChip Readers. We perform final assembly and quality control on our ProteinChip Readers in our facility. We purchase customized extruded aluminum for our ProteinChip Arrays from a third-party supplier. External vendors etch and base coat our ProteinChip Arrays. We apply all chemistries to the ProteinChip Arrays and perform in-process and final quality control at our facility. We outsource the manufacture of ProteinChip Tandem MS Interfaces to a contract manufacturer in Reno, Nevada. We develop software for our ProteinChip Systems in-house, and provide multivariate data analysis software through an OEM arrangement with Salford Systems. We supply a robotic accessory for sample processing through an OEM arrangement with Beckman Coulter. We intend to continue and may expand the subcontracting portions of our manufacturing processes when we believe it leverages the suppliers' manufacturing expertise, reduces costs or improves our ability to meet customer demand. The raw materials and component parts required in our manufacturing operations generally are readily available. However, we use single-source suppliers for some key components and manufacturing services, and finding alternate vendors for these items could be difficult.

Through our wholly-owned subsidiary BioSepra, we manufacture chromatography sorbents at our facility near Paris, France, which was built in 1999 and was specifically designed for the development and manufacture of sorbents. We procure raw materials from well-established chemical suppliers and from subcontractors for some unique materials. The production is performed according to our ISO 9000:1994 registered quality system standards that we intend to strive to improve continuously as required and in response to our customers' recommendations. Manufacturing and quality control are performed according to verified and approved standard operating procedures and the release of each lot is done after a quality assurance review. Plant audits are routinely performed by the QA/QC groups of large pharmaceutical customers.

Intellectual Property

Ciphergen's intellectual property includes a portfolio of owned, co-owned or licensed patents and patent applications. This portfolio increased significantly with Ciphergen's acquisition of BioSepra in 2001. As of December 31, 2003, our patent portfolio included 34 issued U.S.

patents, 93 pending U.S. patent applications and numerous pending patent applications and issued patents outside the U.S. These patents and patent applications are directed to several areas of technology important to Ciphergen's business including our core SELDI technology and its applications, protein biochips, sorbents, instrumentation, software and biomarkers. The issued patents covering the SELDI and RC-MS technologies expire at various times from 2013 to 2018. The issued patents covering BioSepra's process chromatography technology expire at various times from 2012 to 2018.

We derive our rights to the core SELDI technology through royalty-bearing sublicenses from Molecular Analytical Systems, Inc. ("MAS"). MAS holds an exclusive license to patents directed to the SELDI technology from the owner, Baylor College of Medicine. MAS granted certain rights under these patents to our wholly owned subsidiaries, IllumeSys Pacific, Inc. and Ciphergen Technologies, Inc. in 1997. Ciphergen obtained further rights under the patents in 2003 through sublicenses and assignments executed as part of the settlement of a lawsuit between Ciphergen, MAS, LumiCyte and T. William Hutchens. Together, the sublicenses and assignments provide Ciphergen with all rights to develop, make and have made, use, sell, import, market and otherwise exploit products and services covered by the patents throughout the world in all fields and applications, both commercial and non-commercial. We are obligated to pay MAS a royalty equal to 2% of SELDI-related revenues recognized between February 21, 2003 and the earlier of (i) May 28, 2014 or (ii) the date on which the cumulative payments to MAS have reached $10,000,000.

We hold licenses or options to license biomarkers developed using SELDI technology, and related intellectual property. The institutions and companies from which we hold such licenses or options to license include, among others, Eastern Virginia Medical School, Johns Hopkins University, Pfizer Inc., Aaron Diamond AIDS Research Center, University Health Network (Canada), Queen Elizabeth Hospital (Hong Kong), University of Texas Medical Branch, Göteborg University (Sweden), University of Kuopio (Finland), University of Louisville Research Foundation, and Biosite Incorporated.

We have a license to customize and sell Biomarker Patterns Software from Salford Systems. Ciphergen's intellectual property portfolio also includes copyrights on our ProteinChip Software, as well as registered U.S. trademarks for, among other things, the names "Ciphergen", "BioSepra" and "Biomarker Discovery Center", our dragonfly logo and the ProteinChip mark.

Competition

Although we believe that we are currently the only company selling and delivering products with an integrated separations and molecular weight detection biochip platform for proteomics research, we expect to encounter intense competition from a number of companies that offer competing products using alternative technologies. We anticipate that competition will come primarily from companies

providing products that incorporate established technologies, such as gel electrophoresis, liquid chromatography and mass spectrometry.

In order to compete effectively, we will need to demonstrate the advantages of our ProteinChip Systems over alternative technologies and products. We will also need to demonstrate the potential economic value of our ProteinChip products relative to these alternative technologies and products. Some of the companies that provide these products include the Applied Biosystems division of Applera, the Micromass division of Waters Corporation, Amersham Biosciences, Bio-Rad Laboratories, Bruker Biosciences, Perkin-Elmer, Thermo Electron Corporation and several smaller reagent and equipment companies. Our future success will depend in large part on our ability to establish and maintain a competitive position with respect to these and future technologies.

Our bioprocess products business faces competition from established suppliers, most notably Amersham Biosciences but also including Bio-Rad Laboratories, Merck, Millipore, Tosoh and others. Amersham Biosciences is the market leader with a large market share and presence in the production of all U.S. Food and Drug Administration ("FDA") recombinant drugs approved to date. Amersham Biosciences has a wide selection of products, manufacturing economies of scale and a highly trained sales force. Our future success will depend on winning over customers with superior or specialized process proteomics methods and products.

Our Diagnostics Division, in offering proteomic research services through our Biomarker Discovery Center laboratories, may compete with other companies offering proteomic services. We expect an increasing number of companies to provide such services in the future. If our Diagnostics Division is able to develop diagnostic assays which have clinical utility, we will enter the highly competitive in vitro diagnostics market. There are many large, established competitors in this industry including the clinical reference laboratories, such as Quest Diagnostics and Laboratory Corporation of America, and the traditional in vitro diagnostic companies such as Roche Diagnostics, Abbott Laboratories, Johnson & Johnson, Bayer Diagnostics, Dade Behring, Beckman Coulter and others. In addition, we may compete with smaller diagnostic companies depending on the nature of the particular test. Our future success will depend heavily on the accuracy and predictive power of our potential tests, the cost of such tests, reimbursement, and the marketing and distribution arrangements which we can put in place.

In many instances, our competitors have or will have substantially greater financial, technical, research and other resources and larger, more established marketing, sales, distribution and service organizations than we do. Moreover, competitors may have greater name recognition than we do, and may offer discounts as a competitive tactic. Our competitors may succeed in developing or marketing technologies or products that are more effective or commercially attractive than our products, or that would render our technologies and products obsolete. Also, we may not have the financial resources, technical expertise or marketing, distribution or support capabilities to compete successfully in the future.

Environmental Matters and Laser Regulations

International, federal, state and local requirements relating to the discharge of substances into the environment, the disposal of hazardous wastes, and the sale and use of lasers as part of our ProteinChip Readers may have an impact on our manufacturing operations and sales. We believe that we are in material compliance with applicable environmental and laser and radiological health laws and regulations. To date, compliance with regulatory requirements concerning environmental matters and lasers has been accomplished without material effect on our liquidity or capital resources. We have not made, nor do we anticipate the need to make, material capital expenditures to comply with environmental and laser and radiological health laws and regulations.

Government Regulation

General

The future activities of our Diagnostics Division are, or have the potential to be, subject to regulatory oversight by the FDA under provisions of the Federal Food, Drug and Cosmetic Act and regulations thereunder, including regulations governing the development, marketing, labeling, promotion, manufacturing and export of our products. Failure to comply with applicable requirements can lead to sanctions, including withdrawal of products from the market, recalls, refusal to authorize government contracts, product seizures, civil money penalties, injunctions and criminal prosecution.

Generally, certain categories of medical devices, a category that may be deemed to include potential future products based upon our ProteinChip platform, require FDA pre-market approval or clearance before they may be marketed and placed into commercial distribution. Although the FDA believes it has jurisdiction to regulate in-house laboratory tests, or "home brews," that have been developed and validated by the laboratory providing the tests, the FDA has not, to date, actively regulated those tests. The FDA does regulate as medical devices the "active ingredients" (known as "analyte specific reagents" or "ASRs") of certain tests developed in-house by clinical laboratories. ASRs generally do not require FDA pre-market approval or clearance if they are (i) sold to clinical laboratories certified by the government to perform high complexity testing, (ii) manufactured in compliance with the FDA's Quality System Regulations, or QSRs, and (iii) labeled in accordance with FDA requirements, including a statement that their analytical and performance characteristics have not been established. A similar statement would also be required on all advertising and promotional materials relating to ASRs, such as those used in certain of our proposed future tests. Laboratories also are subject to restrictions on the labeling and marketing of tests that have been developed using ASRs. We believe that clinical laboratory testing based upon our ProteinChip platform, and any ASRs that we intend to sell to clinical reference laboratories, currently would not require FDA approval or clearance. The FDA has publicly stated it is reevaluating its ASR policy and regulations, and we expect that revisions to these regulations will be implemented in the near future and will have the effect of increasing the regulatory burden on manufacturers of these devices. The commercialization of our products and services could be impacted by being delayed, halted or prevented. We cannot be sure that tests based upon our ProteinChip platform, or a combination of reagents, will not require pre-market approval or clearance.

Regardless of whether a medical device requires FDA approval or clearance, a number of other FDA requirements apply to its manufacturer and to those who distribute it. Device manufacturers must be registered and their products listed with the FDA, and certain adverse events, corrections and removals must be reported to the FDA. The FDA also regulates the product labeling, promotion and, in some cases, advertising of medical devices. Manufacturers must comply with the FDA's QSRs, which establish extensive requirements for design, quality control, validation and manufacturing. Thus, manufacturers and distributors must continue to spend time, money and effort to maintain compliance, and failure to comply can lead to enforcement action. The FDA periodically inspects facilities to ascertain compliance with these and other requirements.

Diagnostic Kits

The Food, Drug and Cosmetic Act requires that medical devices introduced to the U.S. market, unless exempted by regulation, be the subject of either a premarket notification clearance, known as a 510(k), or a premarket approval, known as a PMA. Some of our potential future clinical products may require a PMA, others may require a 510(k). Other products, like ASRs, may be exempt from regulatory clearance or approval.

With respect to devices reviewed through the 510(k) process, we may not market a device until an order is issued by the FDA finding our product to be substantially equivalent to a legally marketed

device known as a predicate device. A 510(k) submission may involve the presentation of a substantial volume of data, including clinical data, and may require a substantial review. The FDA may agree that the product is substantially equivalent to a predicate device and allow the product

to be marketed in the U.S. The FDA, however, may determine that the device is not substantially equivalent and require a PMA, or require further information, such as additional test data, including data from clinical studies, before it is able to make a determination regarding substantial equivalence. By requesting additional information, the FDA can further delay market introduction of our products.

If the FDA indicates that a PMA is required for any of our potential future clinical products, the application will require extensive clinical studies, manufacturing information and likely review by a panel of experts outside the FDA. Clinical studies to support either a 510(k) submission or a PMA application would need to be conducted in accordance with FDA requirements. Failure to comply with FDA requirements could result in the FDA's refusal to accept the data or the imposition of regulatory sanctions. There can be no assurance that we will be able to meet the FDA's requirements or receive any necessary approval or clearance.

Once granted, a 510(k) clearance or PMA approval may place substantial restrictions on how our device is marketed or to whom it may be sold. Even in the case of devices like ASRs, many of which are exempt from 510(k) clearance or PMA approval requirements, the FDA may impose restrictions on marketing. Our potential future ASR products may be sold only to clinical laboratories certified under Clinical Laboratory Improvement Amendments of 1988, or CLIA, to perform high complexity testing. In addition to requiring approval or clearance for new products, the FDA may require approval or clearance prior to marketing products that are modifications of existing products. We cannot assure you that any necessary 510(k) clearance or PMA approval will be granted on a timely basis, or at all. Delays in receipt of or failure to receive any necessary 510(k) clearance or PMA approval, or the imposition of stringent restrictions on the labeling and sales of our products, could have a material adverse effect on us. As a medical device manufacturer, we are also required to register and list our products with the FDA. In addition, we are required to comply with the FDA's QSRs, which require that our devices be manufactured and records be maintained in a prescribed manner with respect to manufacturing, testing and control activities. Further, we are required to comply with FDA requirements for labeling and promotion. For example, the FDA prohibits cleared or approved devices from being promoted for uncleared or unapproved uses. In addition, the medical device reporting regulation requires that we provide information to the FDA whenever there is evidence to reasonably suggest that one of our devices may have caused or contributed to a death or serious injury, or that there has occurred a malfunction that would be likely to cause or contribute to a death or serious injury if the malfunction were to recur.

Our manufacturing facilities are subject to periodic and unannounced inspections by the FDA and state agencies for compliance with QSRs. Additionally, the FDA will conduct a preapproval inspection for all PMA devices and in some cases for 510(k) devices. Although we believe we will be able to operate in compliance with the FDA's QSRs for ASRs, we have never been inspected by the FDA and cannot assure you that we will be able to maintain compliance in the future. If the FDA believes that we are not in compliance with applicable laws or regulations, it can issue a warning letter, detain or seize our products, issue a recall notice, enjoin future violations and assess civil and criminal penalties against us. In addition, approvals or clearances could be withdrawn in appropriate circumstances. Failure to comply with regulatory requirements or any adverse regulatory action could have a material adverse effect on us.

Any customers using our products for clinical use in the U.S. may be regulated under CLIA. CLIA is intended to ensure the quality and reliability of clinical laboratories in the U.S. by mandating specific standards in the areas of personnel qualifications, administration, participation in proficiency testing, patient test management, quality control, quality assurance and inspections. The regulations promulgated under CLIA establish three levels of diagnostic tests, namely, waived, moderately complex and highly complex, and the standards applicable to a clinical laboratory depend on the level of the tests it performs. We cannot assure you that the CLIA regulations and future administrative interpretations of CLIA will not have a material adverse impact on us by limiting the potential market for our potential future products.

Medical device laws and regulations are also in effect in many of the countries in which we may do business outside the U.S. These range from comprehensive device approval requirements for some or all of our potential future medical device products, to requests for product data or certifications. The number and scope of these requirements are increasing. Medical device laws and regulations are also in effect in some states in which we do business. There can be no assurance that we will obtain regulatory approvals in such countries or that we will not incur significant costs in obtaining or maintaining foreign regulatory approvals. In addition, export of certain of our products which have not yet been cleared or approved for domestic commercial distribution may be subject to FDA export restrictions.

Employees

As of December 31, 2003, we had 341 full-time employees worldwide, including 135 in sales and marketing, 100 in research and development, 67 in manufacturing and 39 in administration. 66 of these employees are employed at BioSepra. 111 of our employees have M.D. degrees or Ph.D. degrees in chemistry, biology or biochemistry, and many are experts in software and engineering. We have also engaged an additional 15 individuals as independent contractors. None of our U.S. employees are covered by a collective bargaining agreement, though many of our European employees are covered under national labor agreements. We believe that our relations with our employees are good. Ciphergen's success will depend in large part on our ability to attract and retain skilled and experienced employees.

Available Information

Ciphergen routinely files reports and other information with the Securities and Exchange Commission ("SEC"), including Forms 8-K, 10-K and 10-Q. The public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-

0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is *http://www.sec.gov* .

Ciphergen maintains an Internet website which includes a link to a site where copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act may be obtained free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. These materials may be accessed by accessing the website at *http://www.ciphergen.com* and selecting "Investors." Paper copies of these documents may also be obtained free of charge by writing to us at Ciphergen Biosystems, Inc., Investor Relations, 6611 Dumbarton Circle, Fremont, CA 94555.

Code of Ethics for Executive Officers

We have adopted a Code of Ethics for Executive Officers. We publicize the Code of Ethics for Executive Officers by posting the policy on our website, *http://www.ciphergen.com* . We will disclose on our website any waivers of, or amendments to, our Code of Ethics.

ITEM 2. PROPERTIES

Our principal facility is located in Fremont, California. The following chart indicates the facilities that we lease, the location and size of each facility and its designated use.

Location	Approximate Square Feet	Operation	Expiration Date
Fremont, California	61,000 sq. ft.	Research and development including Biomarker Discovery Center laboratory, manufacturing, marketing and sales, administration	Lease expires 2008
Fresno, California	1,000 sq. ft.	Research and development	Lease expires May, 2004
Malvern, Pennsylvania	3,000 sq. ft.	Biomarker Discovery Center laboratory	Lease expires 2005
Reno, Nevada	1,000 sq. ft.	Research and development	Lease expires 2005
Woburn, Massachusetts	3,000 sq. ft.	Process proteomics laboratory	Lease expires 2005
Beijing, China	3,000 sq. ft.	Sales, research and development, technical support services	Lease expires August, 2004
Cergy-St. Christophe, France	44,000 sq. ft.	Research and development, manufacturing, marketing and sales, administration	Capital lease expires 2011, at which time the property can be acquired for a nominal amount
Copenhagen, Denmark	2,000 sq. ft.	Biomarker Discovery Center laboratory, sales	Lease expires 2006
Goettingen, Germany	600 sq. ft.	Sales	Lease expires 2005
Guildford, England	4,000 sq. ft.	Sales	Lease (signed in March 2004) expires 2010
Osaka, Japan	600 sq. ft.	Sales	Lease expires 2006
Yokohama, Japan	6,000 sq. ft.	Biomarker Discovery Center laboratory, sales, administration	Lease expires 2005
Zurich, Switzerland	600 sq. ft.	Sales	Lease expires 2007

Currently, we are not subleasing any of these facilities to anyone else. We intend to renew the leases or find comparable space for our Beijing and Fresno facilities when those leases expire in 2004. We also plan to add an additional office in China to support our growth in that

market. We believe our other existing space will be sufficient for our needs through the end of 2004, although we may decide to add to our facilities if warranted by our growth during 2004 and thereafter.

ITEM 3. LEGAL PROCEEDINGS

None.

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

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

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock has been quoted on the Nasdaq National Market under the symbol "CIPH" since the effective date of our initial public offering ("IPO") on September 28, 2000. Prior to that time, there was no public market for our stock. The closing price for our common stock on February 27, 2004 was $8.60 per share. The following table sets forth the high and low sales prices per share of our common stock as reported on the Nasdaq National Market for the periods indicated.

	Sale Price	
	High	Low
Fiscal 2002:		
First Quarter	$ 8.25	$ 5.25
Second Quarter	6.93	2.57
Third Quarter	3.94	2.35
Fourth Quarter	3.85	2.68
Fiscal 2003:		
First Quarter	5.91	3.05
Second Quarter	10.59	4.35
Third Quarter	13.71	6.71
Fourth Quarter	13.97	9.78

We currently expect to retain future earnings, if any, for use in the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. As of February 29, 2004, there were approximately 5,135 holders of our common stock.

Sale of Convertible Senior Notes

On August 22, 2003, we closed the sale of $30.0 million of convertible senior notes due September 1, 2008, underwritten by SG Cowen. Offering costs were approximately $1.8 million. Interest on the notes is 4.5% per annum on the principal amount, payable semiannually on March 1 and September 1, beginning March 1, 2004. The notes are convertible, at the option of the holder, at any time on or prior to maturity of the notes into shares of our common stock initially at a conversion rate of 108.8329 shares per $1,000 principal amount of the notes, which is equal to a conversion price of approximately $9.19 per share. The conversion price, and hence the conversion rate, is subject to adjustment upon the occurrence of certain events, such as stock splits, stock dividends and other distributions or recapitalizations. Because the market value of the stock rose above the conversion price between the day the notes were priced and the closing date, we recorded a discount of $2,676,800 related to the intrinsic value of the beneficial conversion feature resulting from this price change and the fact that the initial purchaser of the notes was not required to purchase the notes until the closing date. Immediately after the closing, Ciphergen common stock had a market price of $10.01 per share, or $0.82 per share higher than the conversion price. The value of the beneficial conversion feature was determined by multiplying this difference in the per share price of Ciphergen's common stock by the 3,264,987 underlying shares. This amount will be amortized to interest expense using the effective interest method over the five-year term of the notes, or shorter period in the event of conversion of the notes.

The notes are our senior unsecured obligations and rank on parity in right of payment with all of our existing and future senior unsecured

debt and rank senior to our existing and future debt that expressly provides that it is subordinated to the notes. The notes are also effectively subordinated in

right of payment to our existing and future secured debt, to the extent of such security, and to our subsidiaries' liabilities. The indenture does not limit the incurrence by Ciphergen or its subsidiaries of other indebtedness.

Ciphergen may redeem the notes at its option, in whole or in part, at any time on or after September 1, 2006 at specified redemption prices plus accrued and unpaid interest, provided that the notes will be redeemable only if the closing price of the stock equals or exceeds 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of the notice of the redemption. The 3,264,987 shares that could be issued if all convertible senior notes were converted into common stock have not been included in the calculation of loss per share, as these potential common shares are antidilutive. Upon a change of control, each holder of the notes may require us to repurchase some or all of the notes at specified redemption prices, plus accrued and unpaid interest. The debenture contains a put option that entitles the holder to require us to redeem the debenture at a price equal to 110% of the principal balance upon a change in control of Ciphergen prior to August 31, 2004 (107.5% from September 1, 2004 through August 31, 2005 and 105.0% thereafter). We do not anticipate that the put option will have significant value because no change of control is currently contemplated.

The notes and underlying shares were registered with the SEC on Form S-3 on October 8, 2003.

Issuance of Common Stock to LumiCyte

On May 28, 2003, Ciphergen settled its litigation with Molecular Analytical Systems, Inc., LumiCyte, Inc. and T. William Hutchens. As part of this settlement, Ciphergen issued to LumiCyte 1,250,000 shares of Ciphergen common stock, which was valued at $7.8 million. These shares were registered with the SEC on Form S-3 on June 24, 2003.

Recent Sales of Other Unregistered Securities

We entered into a joint development agreement with Stanford Research Systems in February 1995, subsequently amended in June 2000. It provides for the issuance of Ciphergen common stock based upon the attainment of specified development milestones. No shares were issued under this agreement in 2003. Additional shares of common stock could be issued upon completion of additional milestones. We also granted warrants to an equipment financing company in 1997 and 1998, which were exercised in 2003, resulting in the issuance of 5,834 shares. Warrants for 3,176 shares were canceled in 2003; no warrants remain outstanding. These stock grants and warrants were not subject to stockholder approval.

Securities Authorized for Issuance Under Equity Compensation Plans

Ciphergen currently maintains three equity-based compensation plans that have been approved by the stockholders—the 1993 Stock Option Plan, which was approved by the stockholders in 1993 and is referred to as the "1993 Plan," the 2000 Stock Plan, which was approved by the stockholders in 2000 and is referred to as the "2000 Plan," and the 2000 Employee Stock Purchase Plan which was approved by the stockholders in 2000 and is referred to as the "ESPP".

- *1993 Plan* . Certain stock option grants remain outstanding to our officers, employees, directors and consultants under this plan. However, the authority to grant new awards under this plan terminated in 2001. The Board of Directors continues to administer this plan with respect to the options that remain outstanding.

- *2000 Plan* . Stock option awards may be granted under the 2000 Plan. The 2000 Plan is administered by, and each award grant must be approved by, the Board or a committee of the Board. Persons eligible to receive awards under the 2000 Plan include our officers, employees, directors and consultants. Ciphergen's non-employee directors are also eligible for certain

automatic stock option grants under the 2000 plan. The Board or a committee of the Board will determine the purchase price for any shares of our common stock subject to an award under the 2000 Plan, the vesting schedule (if any) applicable to each award, the term of each award, and the other terms and conditions of each award, in each case subject to the limitations of the 2000 Plan.

- *ESPP* . Subject to limits, all of our officers and employees in the U.S. are eligible to participate in the ESPP. The ESPP generally operates in successive 6-month purchase periods within 2-year offering periods. Participants in the ESPP may purchase common stock at the end of each purchase period at a purchase price equal to 85% of the lower of the fair market value of the stock at the beginning of the offering period or the end of the purchase period. The administrator of the ESPP may allow

participants to contribute up to 15% of their eligible compensation to purchase stock under the plan. The ESPP is administered by the Board or a committee of the Board.

Summary Table. The following table sets forth, for each of Ciphergen's equity-based compensation plans, the number of shares of Ciphergen common stock subject to outstanding options and rights, the weighted-average exercise price of outstanding options, and the number of shares available for future award grants as of December 31, 2003.

Equity Compensation Plan Table

Plan Category	Number of Shares of Common Stock to be Issued Upon Exercise of Outstanding Options and Rights	Weighted-Average Exercise Price of Outstanding Options and Rights	Number of Shares of Common Stock Remaining Available for Future Issuance Under Equity Compensation Plans (excluding shares reflected in the first column)
Equity compensation plans approved by security holders	4,139,192(1)	$ 5.23	424,817(2)
Equity compensation plans not approved by security holders	—	—	96,750(3)
Total	4,139,192	$ 5.23	521,567

(1) Includes outstanding stock options for 988,671 shares under the 1993 Plan and 3,065,630 shares under the 2000 Plan. Also includes 84,891 shares after giving effect to purchases under the ESPP for the purchase period that will end on May 1, 2004 based on participant contributions through December 31, 2003.

(2) Includes 494,254 shares for the 2000 Plan. On January 1 of each year during the term of the 2000 Plan, the total number of shares available for award purposes under the 2000 Plan will increase by the lesser of (i) 2,150,000 shares, (ii) 5% of the outstanding shares of common stock on the last day of the immediately preceding fiscal year, or (iii) an amount determined by the Board. The aggregate number of shares available for issuance under the 2000 Plan increased by 1,400,000 shares on January 1, 2004. The data presented in this table was calculated as of December 31, 2003 and does not reflect the January 1, 2004 increase. Also includes a deficit of 69,437 shares for the ESPP. On January 1 of each year during the term of the ESPP, the total number of shares available for sales under the ESPP will increase by the lesser of (i) 430,000 shares, (ii) 1% of the outstanding shares of common stock on the last day of the immediately preceding fiscal year, or (iii) an amount determined by the Board. The aggregate number of shares available for sale under the ESPP increased by 290,795 shares on January 1, 2004 and is not included in the table above.

(3) 96,750 shares of common stock remain issuable upon completion of development milestones by Stanford Research Systems.

ITEM 6. SELECTED FINANCIAL DATA

The following tables reflect selected summary consolidated financial data for each of the last five fiscal years. This data should be read in conjunction with the consolidated financial statements and notes thereto, and with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this Form 10-K.

	Years Ended December 31,				
	2003	2002	2001	2000	1999
	(in thousands, except per share data)				
Statement of Operations Data:					
Revenue:					
Products	$ 50,323	$ 33,563	$ 15,742	$ 7,358	$ 3,963
Products revenue from related parties	—	827	1,192	1,064	882
Services	8,049	4,910	2,115	513	165
Total revenue	58,372	39,300	19,049	8,935	5,010

Cost of revenue:					
Products	17,020	10,095	5,516	2,774	1,354
Products revenue from related parties	—	334	434	587	306
Services	3,568	2,329	664	119	48
Litigation settlement	7,257	—	—	—	—
Total cost of revenue	27,845	12,758	6,614	3,480	1,708
Gross profit	30,527	26,542	12,435	5,455	3,302
Operating expenses:					
Research and development	24,920	20,754	12,895	7,475	3,139
Sales and marketing	24,827	20,321	14,301	9,001	4,989
General and administrative	15,831	15,008	13,020	11,322	2,799
Amortization of intangible assets	829	829	650	318	365
Write-off of acquired in-process technology	—	—	1,000	—	—
Total operating expenses	66,407	56,912	41,866	28,116	11,292
Loss from operations	(35,880)	(30,370)	(29,431)	(22,661)	(7,990)
Interest and other income (expense), net	673	1,391	3,762	2,357	(56)
Income attributable to minority interest	(133)	(32)	—	—	—
Loss before provision for income taxes	(35,340)	(29,011)	(25,669)	(20,304)	(8,046)
Provision for income taxes	1,407	61	143	—	—
Net loss	(36,747)	(29,072)	(25,812)	(20,304)	(8,046)
Dividend related to beneficial conversion feature of preferred stock	—	—	—	(27,228)	—
Net loss attributable to common stockholders	$ (36,747)	$ (29,072)	$ (25,812)	$ (47,532)	$ (8,046)
Basic and diluted net loss per share attributed to common stockholders(1)	$ (1.31)	$ (1.08)	$ (0.97)	$ (4.09)	$ (1.26)
Weighted average shares used in computing basic and diluted net loss per share attributable to common stockholders(1)	28,154	26,965	26,512	11,635	6,397

	As of December 31,				
	2003	**2002**	**2001**	**2000**	**1999**
			(in thousands)		
Balance Sheet Data:					
Cash, cash equivalents and investments in securities	$ 47,316	$ 42,541	$ 77,124	$ 107,633	$ 2,799
Working capital	51,970	47,667	70,890	108,020	1,533
Total assets	102,026	87,615	106,816	118,948	6,844
Long-term debt and capital lease obligations, including current portion	31,865	2,816	2,610	840	970
Convertible preferred stock and warrants	—	—	—	—	25,694
Total stockholders' equity (deficit)	47,892	68,354	93,229	113,152	(22,938)

(1) The share and per share data shown above have been restated to reflect Ciphergen's 0.43-for-one reverse stock split, effective September 28, 2000.

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

Overview

We develop, manufacture and sell our ProteinChip Systems, which use patented Surface Enhanced Laser Desorption/Ionization ("SELDI") technology. The ProteinChip Systems consist of a ProteinChip Reader, ProteinChip Software and various accessories, used in conjunction with our consumable ProteinChip Arrays. We market and sell our products primarily to research biologists in pharmaceutical and biotechnology companies, and academic and government research laboratories. In 1997, we acquired IllumeSys Pacific, Inc., which holds specific rights to the SELDI technology for the life science research market. Our first designed and manufactured system, the ProteinChip System, Series PBS I, was

available for shipment in the third quarter of 1997. In 1997, we also established a subsidiary in the U.K. and began direct selling in Europe. During 1999, we initiated an expanded marketing program and in May began shipping the ProteinChip System, Series PBS II, the current version of which is now referred to as the ProteinChip Biology System. In 1999, we also established a joint venture with Sumitomo Corporation to distribute our products in Japan. During 2000, we began offering research services and established Biomarker Discovery Center laboratories in Fremont, California; Copenhagen, Denmark; and Malvern, Pennsylvania.

In 2001, we introduced the ProteinChip Biomarker System, which utilizes sophisticated third-party software to automate pattern recognition-based statistical analysis methods and correlate protein expression patterns from clinical samples with disease phenotypes. We also began selling the Biomek 2000 Workstation, a robotic accessory which is manufactured by Beckman Coulter and which has been optimized for use with our ProteinChip Biomarker System to increase sample throughput and reproducibility. In addition, we expanded our product offering with a SELDI ProteinChip interface to high-end tandem mass spectrometers, which we developed and which is manufactured for us by a third party manufacturing company in Reno, Nevada. On July 31, 2001, Ciphergen acquired the BioSepra process chromatography business from Invitrogen Corporation for approximately $12.3 million in cash and the assumption of approximately $2.2 million in debt. BioSepra S.A., a wholly-owned subsidiary of Ciphergen located near Paris, France, currently has 55 employees who develop, manufacture and market products for the large-scale process chromatography market and provide related contracted services. We have integrated the BioSepra business into our sales and marketing organization and are offering a line of products to address process proteomics, an emerging market driven by pharmaceutical company demand to produce proteins for research, development and therapeutic manufacturing purposes.

In 2002, we opened an office in Beijing, China, hired local staff and began direct selling in China. On August 31, 2002, we increased our ownership interest in Ciphergen Biosystems KK, the Japanese joint venture we formed with Sumitomo Corporation in 1999, from 30% to 70%. Shortly thereafter, we opened a Biomarker Discovery Center laboratory at the Yokohama facility of Ciphergen Biosystems KK. In October 2002, we launched the ProteinChip AutoBiomarker System, an automated version of our ProteinChip Biomarker System, which incorporates an Autoloader and a Biomek robot to increase sample throughput and automate the reading of ProteinChip Arrays.

Since 1997, we have used our resources primarily to develop and expand our proprietary ProteinChip Systems and related consumables and to establish a marketing and sales organization for commercialization of our products. We have also used our resources to establish Biomarker Discovery Center laboratories to provide research services to our clients, to foster further adoption of our products and technology and to discover biomarkers that we seek to patent for diagnostic and other purposes. In addition, we acquired the BioSepra process chromatography business, which expanded our proteomics products business. We also used our funds to establish a joint venture to distribute our products in Japan and to increase our ownership in the joint venture to majority control. Since our

inception we have incurred significant losses and as of December 31, 2003, we had an accumulated deficit of $140.5 million.

Our sales are currently driven by the need for new and better tools to perform protein discovery, characterization, purification, identification and assay development. In addition, many of our customers later enhance their ProteinChip Systems to add automation accessories and advanced software. Most of the ProteinChip Systems sold to our customers also generate a recurring revenue stream from the sale of consumables and maintenance contracts. As a result, we expect our revenue to increase in 2004.

Our expenses, excluding stock-based compensation, have consisted primarily of costs incurred in manufacturing our ProteinChip Systems, arrays and chromatography sorbents, including materials, labor and overhead costs, marketing and sales activities, research and development programs, litigation, and general and administrative costs associated with our operations. We expect our cost of revenue to increase in 2004 as we sell additional units of our ProteinChip System, Arrays and chromatography sorbents, but to decrease as a percent of total revenue as we gain efficiencies from spreading our fixed costs over a greater number of units. We expect our selling expenses to increase in 2004 as we continue to commercialize our products and expand our sales force. We expect our research and development expenses to decrease slightly in 2004 as we transition certain products into manufacturing, partly offset by increased efforts at our Biomarker Discovery Center laboratories to discover, validate and patent biomarkers that may have diagnostic and/or therapeutic utility. We expect our general and administrative expenses to increase to support the overall growth and complexity of our operations. As a result, we expect to incur losses for at least the next year. Our current level of revenue is insufficient for us to become profitable. To become profitable, we will need to increase unit sales of our ProteinChip Systems and Arrays, and chromatography sorbents.

We have a limited history of operations and we anticipate that our quarterly results of operations will fluctuate for the foreseeable future due to several factors, including market acceptance of current and new products, the length of the sales cycle and timing of significant orders, the timing and results of our research and development efforts, the introduction of new products by our competitors and possible patent or license issues. Our limited operating history makes accurate prediction of future results of operations difficult or impossible.

Deferred stock-based compensation for options granted to employees is the difference between the fair value of our common stock on the date such options were granted and their exercise price. Stock-based compensation for options granted to consultants is periodically remeasured as the underlying options vest.

Critical Accounting Policies and Estimates

Ciphergen's discussion and analysis of its financial condition and results of operations are based upon Ciphergen's consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires Ciphergen to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. Ciphergen bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Ciphergen believes the following critical accounting policies affect its more significant judgments and estimates used in the preparation of its consolidated financial statements. (See Note 1 of the Notes to Consolidated Financial Statements.)

Revenue Recognition

We derive our revenue from primarily two sources: (i) products revenue, which includes systems, accessories, software licenses and consumables, and (ii) services and support revenue, which includes Biomarker Discovery Center and process proteomics services, maintenance, training and consulting revenue. As described below, significant management judgments and estimates must be made and used in connection with the revenue recognized in any accounting period.

We recognize revenue from the sales of systems, accessories, separately priced software products and consumables when realized or realizable and earned, which is when the following criteria are met:

- persuasive evidence of an agreement exists,
- the price is fixed or determinable,
- the product has been delivered,
- no significant obligations remain, and
- collection of the receivable is reasonably assured.

For all sales, except for small amounts of consumables, we use a binding purchase order, contract or signed sales quotation as evidence of an arrangement. Sales through our distributors are evidenced by a master agreement governing the relationship together with binding purchase orders on a transaction-by-transaction basis.

At the time of the transaction, we assess whether the price is fixed and determinable and whether or not collection is reasonably assured. We assess whether the price is fixed and determinable based on the payment terms associated with the transaction. If a significant portion of the payment is due after our normal payment terms, which are 30 to 90 days from invoice date in most countries, we generally treat the price as not being fixed and determinable. In these cases, we recognize revenue for the extended portions of the payment as they become due. We assess collectibility based on a number of factors, including past transaction history with the customer and the creditworthiness of the customer. We do not request collateral from our customers. If we determine that collection of a payment is not reasonably assured, we defer the revenue until the time collection becomes reasonably assured, which is generally upon receipt of cash.

Delivery generally occurs when the product is delivered to a common carrier or when the customer receives the product, depending on the nature of the arrangement. Revenue from shipping and handling is generally recognized upon product shipment, based on the amount billed to customers for shipping and handling. The related cost of shipping and handling is included in cost of revenue upon product shipment.

We generally include a standard 12-month warranty on our instruments and accessories in the form of a maintenance contract upon initial sale. We also sell separately priced maintenance (extended warranty) contracts, which are generally for 12 or 24 months, upon expiration of the initial warranty. Revenue for both the standard and extended warranty maintenance contracts is deferred and recognized ratably over the maintenance contract term. Related costs are expensed as incurred. If we were to experience an increase in warranty claims or if costs of servicing these maintenance contracts were greater than the expectations upon which the maintenance contract deferrals had been based, our gross margins could be adversely affected.

Revenue from Biomarker Discovery Center and process proteomics research contracts generally is recognized based upon the achievement of substantive milestones described in the contracts. Revenue from up-front payments is deferred and recognized ratably over the expected life of the contract. Our training is billed based on published course fees and consulting services are billed based on daily rates. We generally recognize revenue as these services are performed.

For revenue arrangements with multiple elements that are delivered at different points in time (for example, where we have delivered the hardware and software but are also obligated to provide services, maintenance and/or training), we evaluate whether the delivered elements have standalone value to the customer, whether the fair value of the undelivered elements is reliably determinable, and whether the delivery of the remaining elements is probable and within our control. When all these conditions are met, we recognize revenue on the delivered elements. If any one of these conditions is not met, we defer the recognition of revenue until all these conditions are met or all elements have been delivered. Fair values for ongoing maintenance are based upon separate sales of renewals to other customers. Fair values for services, such as training or consulting, are based upon separate sales by us of those services to other customers.

Allowance for Doubtful Accounts

We maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to make required payments. These reserves are determined by (1) analyzing specific customer accounts that have known or potential collection issues, and (2) reviewing the length of time receivables are outstanding and applying historical loss rates to the aging of the accounts receivable balances. If the financial condition of Ciphergen's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances would be required.

Inventory Reserves

We write down our inventory for estimated excess and obsolete inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand, market conditions and the release of new products that will supersede older ones. Such estimates are difficult to make under current volatile economic conditions. Reviews for excess inventory are done on a quarterly basis and required reserve levels are calculated with reference to our projected ultimate usage of that inventory. In order to determine the ultimate usage, we take into account recent sales forecasts, historical experience, projected obsolescence and our current inventory levels. If actual market conditions are less favorable than those projected by management, additional inventory write-downs may be required.

Depreciation and Amortization

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization is computed for financial reporting purposes principally using the straight-line method over the following estimated useful lives: machinery and equipment, 2-8 years; computer equipment and software, 3-4 years; furniture and fixtures, 3-10 years; buildings and leasehold improvements, lesser of their economic life or the term of the underlying lease. If assets are determined to have useful lives are shorter than originally estimated, the net book value of the assets is depreciated over the newly determined remaining useful lives.

Valuation of Long-Lived Assets Including Acquired Intangible Assets

We review long-lived assets, which include property, plant and equipment and acquired identifiable intangibles, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Impairment evaluations involve management estimates of the useful lives of the assets and the future cash flows they are expected to generate. An impairment loss is recognized when estimated undiscounted future cash flows expected to result from the use of the asset plus net proceeds expected from disposition of the asset (if any) are less than the carrying value of the asset. This approach also uses our estimates of future market growth, forecasted revenue and costs and appropriate discount rates. Actual useful lives, cash flows and other factors could be different from those estimated by management and this could have a material effect on our operating results and

financial position. When impairment is identified, the carrying amount of the asset is reduced to its estimated fair value. Deterioration of our business for a significant product or in a particular geographic region in the future could also lead to impairment adjustments as such issues are identified.

Goodwill Impairment

We recorded goodwill principally as a result of our acquisition of BioSepra in 2001 and the increase in our ownership of Ciphergen Biosystems KK in 2002. We perform goodwill impairment tests on an annual basis and more frequently when events and circumstances occur that indicate a possible impairment of goodwill. In determining whether there is an impairment of goodwill, we calculate the estimated fair value of the reporting unit in which the goodwill is recorded using a discounted future cash flow method. We then compare the resulting fair value to the net book value of the reporting unit, including goodwill. If the net book value of a reporting unit exceeds its fair value, we measure the amount of the impairment loss by comparing the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. To the extent that the carrying amount of a reporting unit's goodwill exceeds its implied fair value, we recognize a goodwill impairment loss. We performed our annual impairment tests in 2002 and 2003, and we determined that no impairment had occurred. The discounted future cash flow method used in the first step of our impairment test involves significant estimates including future cash inflows from estimated revenues, future

cash outflows from estimated project cost and general and administrative costs, estimates of timing of collection and payment of various items and future growth rates as well as discount rate and terminal value assumptions. Although we believe the estimates and assumptions that we used in testing for impairment are reasonable and supportable, significant changes in any one of these assumptions could produce a significantly different result.

Stock-Based Compensation

We have various stock option, stock purchase and incentive plans to reward employees and key executive officers of our company. We account for stock-based employee compensation arrangements in accordance with the provisions of Accounting Principles Board Opinion No. 25 ("APB 25"), "Accounting for Stock Issued to Employees", and apply the disclosure provisions of Statement of Financial Accounting Standards No. 123 ("SFAS 123"), "Accounting for Stock-Based Compensation", as amended by Statement of Financial Accounting Standards No. 148, "Accounting for Stock-Based Compensation, Transition and Disclosure". Under APB 25, unearned stock-based compensation is measured as the difference, if any, on the date of grant, between the fair value of our common stock and the exercise price. Under SFAS 123, stock-based compensation is based on the fair value of the stock award measured using option valuation models. All deferred stock-based compensation is amortized and expensed in accordance with Financial Accounting Standards Board Interpretation No. 28, an accelerated vesting model. Although we do disclose in the notes to the financial statements the pro forma impact of applying the provisions of SFAS 123 to our stock awards, if we were to change our accounting policy to fully adopt the fair value measurement provisions of SFAS 123, it could have a material impact on our financial position and results of operations.

Contingencies

We have been, and may in the future become, subject to legal proceedings related to intellectual property licensing matters. Based on the information available at the balance sheet dates and through consultation with our legal counsel, we assess the likelihood of any adverse judgments or outcomes to these matters, as well as potential ranges of probable loss. If losses are probable and reasonably estimable, we will record a reserve in accordance with Statement of Financial Accounting Standards No. 5, "Accounting for Contingencies". Currently we have no such reserves recorded. Any reserves recorded in the future may change due to new developments in each matter.

Deferred Taxes

We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. While we have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance, in the event we were to determine that Ciphergen would be able to realize its deferred tax assets in the future in excess of its net recorded amount, an adjustment to the deferred tax asset would increase income in the period such determination was made. Likewise, should we determine that Ciphergen would not be able to realize all or part of its net deferred tax asset in the future, an adjustment to the deferred tax asset would be charged to income in the period such determination was made.

Results of Operations

Comparison of Years Ended December 31, 2003, 2002 and 2001

Revenue

Product revenue was $50.3 million in 2003, $34.4 million in 2002 and $16.9 million in 2001. The $15.9 million or 46% increase in product revenue from 2002 to 2003 was the result of increased unit sales of higher-end configurations of our ProteinChip System, accessories, software and arrays, aided by the increase in the size of our sales force and new product offerings, and increased chromatographic sorbents revenue for BioSepra. The $17.5 million or 103% increase in product revenue from 2001 to 2002 was primarily the result of increased unit sales of ProteinChip Systems and Arrays, and increased purchases of higher-end configurations, aided by the increase in the size of our sales force, new product offerings and increased market acceptance of SELDI technology, as well as increased chromatographic sorbents revenue for BioSepra. BioSepra revenue was included for only five months of 2001 following its acquisition on July 31, 2001. Product revenue would have grown approximately 70% if BioSepra revenue was excluded for both 2002 and 2001.

Service revenue was $8.0 million in 2003, $4.9 million in 2002, and $2.1 million in 2001. The $3.1 million or 64% increase in service revenue from 2002 to 2003 was primarily due to an increase in revenue from maintenance contracts driven by growth in our installed base, an increase in revenue from training and consulting services, as well as an increase in revenue from collaboration services handled through our Biomarker Discovery Center laboratories. The $2.8 million or 132% increase in service revenue from 2001 to 2002 was primarily due to an increase in revenue from maintenance contracts driven by growth in our installed base, as well as an increase in revenue from collaboration services handled through our Biomarker Discovery Center laboratories.

We expect to see overall revenue growth of approximately 30-40% in 2004, for total forecasted 2004 revenue of approximately $76-82 million. Based on seasonality and other factors, we would expect approximately 20% of annual revenue to be in the first quarter,

approximately 23% in the second quarter, approximately 26% in the third quarter and approximately 31% in the fourth quarter.

Cost of Revenue

Cost of product revenue was $17.0 million in 2003, $10.4 million in 2002, and $6.0 million in 2001. The $6.6 million or 63% increase in cost of product revenue from 2002 to 2003 resulted from an increase in unit sales of our ProteinChip accessories and arrays, as well as an increase in the sales volume of chromatography sorbents from BioSepra. The gross margin for product revenue decreased from 70% in 2002 to 66% in 2003. This decrease was largely due to product mix, as well as lower gross margins for chipware and consumables resulting from lower yields in production. Also, the amortization of certain expenses related to our litigation settlement reduced the 2003 gross margin for product revenue by approximately 1%.

The $4.5 million or 75% increase in cost of product revenue from 2001 to 2002 resulted from an increase in unit sales of our ProteinChip Systems and arrays, as well as an increase in the sales volume of chromatography sorbents from BioSepra. BioSepra's cost of revenue was included for only five months of 2001 following its acquisition on July 31, 2001. The gross margin for product revenue increased from 65% in 2001 to 70% in 2002. This improvement, including an improved gross margin at BioSepra, was largely due to manufacturing efficiencies as production volumes of ProteinChip Systems, arrays and BioSepra sorbents increased.

Stock-based compensation expense in cost of product revenue was $81,000 in 2003, $124,000 in 2002, and $232,000 in 2001.

Cost of service revenue was $3.6 million in 2003, $2.3 million in 2002, and $664,000 in 2001. From 2002 to 2003, cost of service revenue increased $1.2 million or 53% due to increased field service costs to provide service for a greater number of maintenance contracts, and increased collaboration expenses associated with revenue-generating contracts at our Biomarker Discovery Center laboratories. The gross margin for service revenue increased from 53% in 2002 to 56% in 2003 mainly due to improved operating efficiencies of our field service team and our Biomarker Discovery Center laboratories. These increases were partially offset by the amortization of expenses associated with our litigation settlement, which reduced the 2003 gross margin for service revenue by about 2%.

From 2001 to 2002, cost of service revenue increased $1.7 million or 251% due to increased field service costs to provide service for a greater number of maintenance contracts, and increased collaboration expenses at our Biomarker Discovery Center laboratories. The gross margin for service revenue decreased from 69% in 2001 to 53% in 2002 due to an increase in staffing needed to expand the capacity of our field service force. The number of field service engineers effectively grew by more than 80% from 2001 to 2002. We experienced higher-than-usual field service costs related to new products and we also experienced a slightly lower overall gross margin for Biomarker Discovery Center collaborative service projects in 2002.

We expect our overall gross margin to be in the 67-70% range during 2004.

Litigation Settlement

On May 28, 2003, Ciphergen settled its litigation with Molecular Analytical Systems, Inc. ("MAS"), LumiCyte, Inc. ("LumiCyte"), and T. Williams Hutchens. As part of the settlement:

- Ciphergen paid LumiCyte $3.0 million in cash;
- Ciphergen issued to LumiCyte 1,250,000 shares of Ciphergen common stock which was valued at $7.8 million; and
- Ciphergen agreed to pay license fees to MAS based on the revenues Ciphergen and its affiliates derive from the SELDI technology and recognize between February 21, 2003 and May 28, 2014, provided that such license fees will not exceed $1.0 million during the calendar year 2003 or $10.0 million in the aggregate.

The total cost of the litigation settlement, including future license fees, amounted to $20.8 million, of which $7.3 million was attributed to periods prior to April 1, 2003 and expensed as a non-recurring item in the second quarter of 2003. $907,000 was amortized to cost of revenue for the remainder of 2003 and the remaining $12.6 million will be amortized to cost of revenue in future periods through the second quarter of 2014.

Operating Expenses

Research and Development

Research and development expenses were $24.9 million in 2003, $20.8 million in 2002, and $12.9 million in 2001. From 2002 to 2003, research and development expenses increased $4.2 million or 20% primarily due to an increase of $2.7 million in materials and supplies used in the development of new products. Payroll and related costs increased approximately $1.4 million due to a higher average research and development headcount in 2003 compared to 2002, even though our research and development headcount at the end of 2003 was slightly lower than it was at the end of 2002. These increases were partially offset by a decline of $615,000 in costs of outside services. Stock-based compensation expense in research and development was $187,000 in 2003, compared to a benefit of $36,000 in 2002. Certain stock-based compensation expense was reversed in 2002 due to the cancellation of stock options for a consultant whose service to Ciphergen ended during the period. A $131,000 non-cash milestone payment to Stanford Research Systems in the form of a stock grant was made in 2002. No milestone payments were made to Stanford Research Systems in 2003.

From 2001 to 2002, research and development expenses increased $7.9 million or 61% primarily due to a 62% increase in headcount, exclusive of the BioSepra acquisition, thereby increasing payroll and related costs approximately $4.2 million. Collaboration and consulting expenses associated with non revenue-generating research and development projects, including Biomarker Discovery Center laboratory activities, increased approximately $1.7 million. The cost of materials and supplies used in our labs, as well as expensed equipment and depreciation on capital equipment, increased $1.4 million as we devoted more resources to new and ongoing projects. The inclusion of BioSepra for a full year also added to our research and development expenses. These increases were partially offset by a decline of $619,000 in stock-based compensation expense. One non-cash milestone payment to Stanford Research Systems in the form of a stock grant totaling $131,000 was made in 2002 as compared to stock grants to Stanford Research Systems in 2001 totaling $268,000.

Stock-based compensation expense in research and development expenses, excluding the milestone payments described above, was an expense of $187,000 in 2003, a benefit of $36,000 in 2002, and an expense of $583,000 in 2001. We expect research and development expenses, exclusive of stock-based compensation, to modestly decline in 2004 relative to 2003 as we transition certain products into manufacturing, partially offset by increased activities through our Biomarker Discovery Center laboratories to discover, validate and patent biomarkers.

Sales and Marketing

Sales and marketing expenses were $24.8 million in 2003, $20.3 million in 2002, and $14.3 million in 2001. From 2002 to 2003, sales and marketing expenses increased $4.5 million or 22%, largely due to higher payroll-related costs as a result of a 19% increase in the sales and marketing staff, exclusive of the Ciphergen Biosystems KK acquisition, thereby increasing payroll and related costs approximately $2.3 million. Depreciation and other equipment expenses increased $521,000, largely due to an increase in demonstration equipment. The inclusion of Ciphergen Biosystems KK for a full year also added approximately $1.9 million to our sales and marketing expenses. These increases were partially offset by a decline of $124,000 in stock-based compensation expense.

From 2001 to 2002, sales and marketing expenses increased $6.0 million or 42%, largely due to higher payroll-related costs as a result of an 18% increase in the sales and marketing staff, exclusive of the BioSepra and Ciphergen Biosystems KK acquisitions, thereby increasing payroll and related costs approximately $3.1 million. The cost of materials and supplies used in the field, as well as travel, consulting and promotional activities increased $2.0 million as we increased our sales activities. The inclusion of BioSepra and Ciphergen Biosystems KK also added approximately $1.6 million to our sales

and marketing expenses. These increases were partially offset by a decline of $521,000 in stock-based compensation expense.

Stock-based compensation expense in sales and marketing expenses was $274,000 in 2003, $398,000 in 2002, and $919,000 in 2001. We expect sales and marketing expenses, exclusive of stock-based compensation, to increase in 2004 relative to 2003 as we continue to grow our sales force in North America, Western Europe, Japan and China, and increase our promotional activities.

General and Administrative

General and administrative expenses were $15.8 million in 2003, $15.0 million in 2002, and $13.0 million in 2001. From 2002 to 2003, general and administrative expenses increased $823,000 or 5%, largely driven by a 9% increase in the administrative staff, exclusive of the Ciphergen Biosystems KK acquisition, thereby increasing payroll and related costs approximately $680,000. Legal fees related to our litigation declined by approximately $1.0 million as a result of the settlement reached during 2003, but costs related to patent filings increased by nearly the same amount. The inclusion of Ciphergen Biosystems KK for a full year also added approximately $434,000 to our general and administrative expenses. These increases were partially offset by a decrease of $710,000 in stock-based compensation expense.

From 2001 to 2002, general and administrative expenses increased $2.0 million or 15%, largely driven by higher legal fees of $1.4 million resulting from our litigation and increased patent filings, and by a 17% increase in the administrative staff, exclusive of the BioSepra acquisition, thereby increasing payroll and related costs approximately $692,000. The inclusion of BioSepra for a full year also added approximately $491,000 to our general and administrative expenses. These increases were partially offset by a decrease of $1.3 million in stock-based compensation expense.

Stock-based compensation expense in general and administrative expenses was $876,000 in 2003, $1.6 million in 2002, and $2.9 million in

2001. We expect general and administrative expenses, exclusive of stock-based compensation, to increase in 2004 as we add necessary infrastructure to support the increased activity and complexity of our business.

Amortization of Intangible Assets

Amortization of intangible assets was $829,000 in 2003, $829,000 in 2002, and $650,000 in 2001. From 2001 to 2002, amortization of intangible assets increased $179,000 or 28% due to the amortization of acquired completed technology and patents related to our acquisition of BioSepra on July 31, 2001. We adopted Statement of Financial Accounting Standards No. 142, "Goodwill and other Intangible Assets," on January 1, 2002, and therefore the amortization of goodwill recorded for earlier business combinations ceased upon the adoption date. The amount of amortization for intangible assets is expected to remain the same each year through 2007.

Write-Off of Acquired In-Process Technology

In connection with the purchase of BioSepra, we recorded a $1.0 million charge to acquired in-process technology in 2001. The amount was determined by identifying research projects for which technological feasibility had not been established and no alternative future uses existed. The value of the projects identified to be in progress was determined by estimating the future cash flows of the product and discounting those net cash flows back to their present value at a discount rate consistent with the inherent risk of the particular project. The net cash flows from the identified in-process projects were expected to commence at various times from 2002 to 2004 and included estimates of research and development costs needed to bring each project from its current state of development to a point of commercial feasibility. The cash flows were based on expected future revenues, cost of revenues, selling, general and administrative costs, research and development costs needed to maintain

each project throughout its life cycle, and applicable income taxes for the projects. The discount rates used in the present value calculations were derived from the weighted-average cost of capital of BioSepra and adjusted upward to reflect additional risks inherent in the development life cycle of the particular project. Such discount rates ranged between 19% and 25% for all projects. Development of the technologies remains a risk to us due to factors including the remaining effort to achieve technological feasibility, rapidly changing customer markets and competitive threats from other companies.

Interest and Other Income (Expense), Net

Interest income was $702,000 in 2003, $1.5 million in 2002, and $4.1 million in 2001. The decreases of $841,000 from 2002 to 2003 and $2.6 million from 2001 to 2002 were due to lower average investment balances and declining interest rates.

Interest expense was $857,000 in 2003, $152,000 in 2002, and $150,000 in 2001. The increase of $705,000 from 2002 to 2003 was largely due to the issuance of $30.0 million of convertible senior notes in August 2003. Approximately $192,000 of the interest expense was non-cash, attributable to the amortization of the beneficial conversion feature associated with the notes. The increase of $2,000 from 2001 to 2002 was due to the addition of the debt of Ciphergen Biosystems KK at August 31, 2002.

Other income (expense) was $828,000 of income in 2003, $0 in 2002, and $201,000 of expense in 2001. The income of $828,000 in 2003 was mainly due to a $773,000 customer cancellation fee recorded as a gain in 2003. The expense of $201,000 in 2001 was mainly due to a reduction in our Delaware franchise tax liability.

Subsequent to our acquisition of majority control of Ciphergen Biosystems KK on August 31, 2002, we attribute a share of the joint venture's gains or losses to SC BioSciences' (a subsidiary of Sumitomo Corporation) minority interest. For 2003, we attributed $32,000 of loss to minority interest, whereas in 2002 we attributed $32,000 of income to the minority interest.

Income Taxes

We have incurred net losses since inception and consequently are not subject to corporate income taxes in the U.S. to the extent of our tax loss carryforwards. At December 31, 2003 we had net operating loss carryforwards of approximately $111.4 million for federal and $21.0 million for state tax purposes. If not utilized, these carryforwards will begin to expire beginning in 2009 for federal purposes and 2004 for state purposes. We also have research credit carryforwards of approximately $3.2 million and $3.2 million for federal and state tax purposes, respectively. If not utilized, the federal research credit carryforwards will expire in various amounts beginning in 2010. The California research credit can be carried forward indefinitely. The utilization of net operating loss carryforwards to reduce future income taxes will depend on our ability to generate sufficient taxable income prior to the expiration of the net operating loss carryforwards. In addition, the maximum annual use of the net operating loss carryforwards may be limited in situations where changes occur in our stock ownership.

We incur income tax liabilities primarily in France, as well as in most of the other countries outside the U.S. in which we operate. We have used net operating loss carryforwards to reduce our income tax liability in France. We fully utilized our French net operating loss carryforwards in 2003, resulting in higher 2003 French income tax liability.

Liquidity and Capital Resources

From our inception through December 31, 2003, we have financed our operations principally with $135.1 million from the sales of products and services to customers and net proceeds from equity financings totaling approximately $145.8 million. This includes net proceeds of $92.4 million from our

initial public offering in September 2000 and net proceeds of $26.9 million from our Series E Preferred Stock financing in March 2000. We also received $28.1 million of net proceeds from the sale of 4.5% convertible senior notes on August 22, 2003. These notes are due September 1, 2008. Cash, cash equivalents and investments in securities at December 31, 2003 were $47.3 million, compared to $42.5 million at December 31, 2002. Working capital at December 31, 2003 was $52.0 million, compared to $47.7 million at December 31, 2002. Long-term debt and capital lease balances at December 31, 2003 totaled $31.9 million, compared to $2.8 million at December 31, 2002, largely as a result of the issuance of $30.0 million in convertible senior notes and the increase in long-term debt to finance capital equipment purchases.

Net cash used in operating activities was $21.3 million in 2003 compared to $27.3 million in 2002. More cash was collected from customers in 2003 as compared to 2002 due to increased revenues in 2003. This increase in cash enabled Ciphergen to fund increases in operating expenses and inventory purchases as well as to pay $3 million to LumiCyte for the litigation settlement. The increase in cash collected was offset by a decrease in interest income received in 2003 as compared to 2002 as a result of lower investment balances and declining interest rates. In 2002, less cash was collected as compared to 2003 due to lower revenues in 2002 as compared to 2003. The cash collected in 2002 was used primarily to fund increases in operating expenses.

Net cash used in investing activities was $3.5 million in 2003 compared to net cash provided by investing activities of $7.5 million in 2002. Net cash used in investing activities in 2003 consisted of property and equipment purchases of $6.4 million, partly offset by net maturities of investment securities of $2.6 million as a result of funding our operations, and a $230,000 repayment of an officer loan. Net cash provided by investing activities in 2002 consisted primarily of net maturities of investment securities of $10.9 million as a result of funding our operations, and cash acquired upon acquisition of Ciphergen Biosystems KK of $1.3 million, partly offset by property and equipment purchases of $4.4 million. In 2002, we also used $446,000 to purchase additional common stock of Ciphergen Biosystems KK. We expect to acquire additional capital equipment on an ongoing basis as we add staff, increase capacity and improve capabilities. We anticipate capital expenditures of approximately $5 million to $6 million in 2004.

Net cash provided by financing activities was $31.0 million in 2003 compared to net cash used in financing activities of $3.8 million in 2002. The increase resulted primarily from $28.1 million in net proceeds from our issuance of convertible senior notes, after offering costs of approximately $1.8 million. In addition, during the second quarter of 2003, we entered into a three-year loan agreement with GE Capital Corporation to finance up to $5.0 million of capital equipment purchases. As of December 31, 2003, we had financed approximately $2.1 million of capital equipment purchases through this facility at an annual interest rate of 7.48%. There were also repayments of three stockholder loans in the aggregate principal amount of $196,000, and the issuance of common stock under our stock option and employee stock purchase plans of $1.6 million, offset by the repayment of capital lease obligations of $684,000 and repayments of the GE loan of $313,000. Net cash used in financing activities in 2002 consisted of the repayment of a $4.0 million short-term loan to Ciphergen Biosystems KK and repayments of long-term debt and capital lease obligations of $564,000, partly offset by the issuance of common stock under our stock option and employee stock purchase plans of $706,000.

We currently believe that current cash resources will be sufficient to maintain current and planned operations at least through the end of 2005. Ciphergen currently expects to fund expenditures for capital requirements as well as liquidity needs from a combination of available cash, marketable securities and long-term debt. We may be required to raise additional capital through a variety of sources, including securities issuances and collaborative arrangements. If additional capital is raised through the issuance of equity or securities convertible into equity, our stockholders may experience dilution, and such securities may have rights, preferences or privileges senior to those of the holders of

our common stock or the notes. If we obtain funds through arrangements with collaborators or strategic partners, we may be required to relinquish our rights to certain technologies or products that we might otherwise seek to retain. Additional financing may not be available to us on favorable terms, if at all. If we are unable to obtain financing on acceptable terms, we may be unable to execute our business plan and we could be required to delay, reduce the scope of, or eliminate our operations and we may not be able to pay off the notes when and if they come due.

The following summarizes Ciphergen's contractual obligations at December 31, 2003, and the effect such obligations are expected to have on our liquidity and cash flow in future periods (in thousands).

	Total	Less than 1 Year	1-3 Years	4-5 Years	Beyond 5 Years

Contractual obligations(1):					
Capital lease obligations	$ 2,598	$ 324	$ 661	$ 720	$ 893
Equipment financing loan	1,752	662	1,090	—	—
Convertible senior notes(2)	30,000	—	—	30,000	—
Non-cancelable collaboration obligations	84	84	—	—	—
Non-cancelable operating lease obligations	17,201	3,982	7,173	6,046	—
Purchase obligations(3)	1,032	1,017	15	—	—
Total contractual cash obligations	$ 52,667	$ 6,069	$ 8,939	$ 36,766	$ 893

(1) Principal amounts, not including interest

(2) Excludes the beneficial conversion feature amounting to $2,677, less related amortization of $192. See Note 8.

(3) Purchase obligations include agreements to purchase inventory that are enforceable and legally binding on Ciphergen and that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. Purchase obligations exclude agreements that are cancelable without penalty.

Ciphergen has complied with all covenants or other requirements set forth in its credit agreements. In March 2004, we entered into a six year lease agreement for an office and lab in the U.K. Total payments will be approximately $811,000 over the life of the lease. We have also entered into a cancelable commitment to fund a Biomarker Discovery Center laboratory at the Johns Hopkins University School of Medicine which totals $672,000 in 2004 and $685,000 in 2005. In addition, we are responsible for providing Ciphergen Biosystems KK, our 70%-owned joint venture in Japan, with its working capital.

Ratio of Earnings to Fixed Charges

The computation of the ratio of earnings to fixed charges includes Ciphergen Biosystems, Inc. and its consolidated subsidiaries. The ratio of earnings to fixed charges is computed by dividing:

- loss before taxes adjusted for fixed charges and minority interest, by
- fixed charges, which includes interest expense and the portion of interest expense under operating leases deemed by us to be representative of interest.

For the fiscal years ended December 31, 2001, 2002 and 2003, earnings were inadequate to cover fixed charges by $25.7 million, $29.0 million, and $35.4 million, respectively.

Recent Accounting Pronouncements

See Note 1 of the Consolidated Financial Statements for a full description of recent accounting pronouncements, including the respective dates of adoption and effects on results of operations and financial condition.

FACTORS THAT MAY AFFECT OUR RESULTS

We expect to continue to incur net losses in 2004 and at least the early part of 2005. If we are unable to significantly increase our revenues or significantly decrease our expenses, we may never achieve profitability.

From our inception in December 1993 through December 31, 2003, we have generated cumulative revenue of approximately $135.1 million and have incurred net losses of approximately $140.5 million. We have experienced significant operating losses each year since our inception and expect these losses to continue for at least the next several quarters. For example, we experienced net losses of approximately $25.8 million in 2001, $29.1 million in 2002 and $36.7 million in 2003. Our losses have resulted principally from costs incurred in research and development, sales and marketing, litigation, and general and administrative costs associated with our operations. These costs have exceeded our revenue, which, to date, has been generated principally from product sales. We expect to incur additional operating losses and these losses may be substantial as a result of increases in expenses for manufacturing, marketing and sales, research and product development, and general and administrative costs. We may never achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

If we are unable to further establish the utility of our products, our products and services may not achieve market acceptance.

The commercial success of our ProteinChip Systems and Arrays and chromatography sorbents depends upon validating their utility for important biological applications and increasing their market acceptance by researchers in pharmaceutical and biotechnology companies, academic and government research centers and clinical reference laboratories. If our products are not demonstrated to be more effective in providing commercially useful protein information than other existing technologies, it could seriously undermine market acceptance of our products and reduce the likelihood that we will ever achieve profitability.

We may not succeed in developing diagnostic products and even if we do succeed in developing diagnostic products, they may never achieve significant commercial market acceptance.

There is considerable technology risk in developing diagnostic products based on our biomarker discovery efforts; potential tests may fail to validate in larger clinical studies and may not achieve acceptable levels of clinical sensitivity and specificity. If we do succeed in developing diagnostic tests with acceptable performance characteristics, we may not succeed in achieving significant commercial market acceptance for those tests. Our ability to successfully commercialize diagnostic products that we may develop will depend on several factors, including:

- our ability to convince the medical community of the safety and clinical efficacy of our products and their potential advantages over existing diagnostic products;
- our ability to establish business relationships with other diagnostic companies that can assist in the commercialization of these products; and
- the agreement by Medicare and third-party payers to provide full or even partial reimbursement coverage for our products, the scope and extent of which will affect patients willingness to pay

for our products and will likely heavily influence physicians' decisions to recommend our products.

These factors present obstacles to significant commercial acceptance of our products, which we will have to spend substantial time and money to overcome, if we can do so at all. Our inability to successfully do so will harm our business.

If we are unable to attract additional clients for our Biomarker Discovery Center services and satisfy these clients, we may not be successful in furthering adoption of our products and technology or generating additional revenue through commercial rights related to biomarker discoveries.

An important part of our business strategy is to operate Biomarker Discovery Center laboratories in part through partnerships with academic and government research centers, and pharmaceutical and biotechnology companies in order to increase adoption of our products and technology. Although we are currently in negotiation with additional potential partners and clients, to date we have entered into only a few such arrangements. Failure to enter into additional arrangements or expand existing relationships could limit adoption of our products and prevent us from generating additional revenue through commercialization of biomarker discoveries.

If we fail to successfully expand sales of our ProteinChip Systems and develop new versions of proteomic systems or leverage our chromatography product expertise to expand sales of other products, our revenue will not increase and we will not achieve profitability.

Our success depends on our ability to continue to expand commercial sales of our ProteinChip Systems, including our ProteinChip Arrays, and develop new, higher performance, easier to use versions of proteomic systems. We may encounter difficulties in developing new, higher performance products or producing our current proteomic systems on a timely basis, we may not be able to produce them economically, we may fail to achieve expected performance levels, or we may fail to gain industry acceptance of such products. We also may be unable to leverage our chromatography product expertise in conjunction with our ProteinChip technology to expand commercial sales of our ProteinChip Systems and chromatography products.

If we fail to continue to develop the technologies we base our products on, we may not be able to successfully foster further adoption of our products and services as an industry standard or develop new product offerings.

The technologies we use for our ProteinChip Systems and for our chromatographic sorbents are new and complex technologies, which are subject to change as new discoveries are made. New discoveries and further progress in our field are essential if we are to maintain and expand the adoption of our product offerings. Development of these technologies remains a substantial risk to us due to various factors including the scientific challenges involved, our ability to find and collaborate with others working in our field, and competing technologies, which may prove more successful than ours.

If we are unable to provide our customers with software that enables the integration and analysis of large volumes of data, the

acceptance and use of our products may be limited.

The successful commercial research application of our products requires that they enable researchers to process and analyze large volumes of data and to integrate the results into other phases of their research. The nature of our software enables a level of integration and analysis that is adequate for many projects. However, if we do not continue to develop and improve the capabilities of our ProteinChip Software to perform more complex analyses of customer samples and to meet increasing customer expectations, market acceptance of our products may not increase and we could

lose our current customers, which might adversely impact our revenues and we could be unable to develop a profitable business.

If our Bioprocess Products Group fails to develop new products, we may not be able to grow or maintain this operation in the face of larger entrenched competitors.

Customers using chromatographic processes to separate proteins have traditionally been slow to adopt new technologies, even when those new technologies offer considerable advantages over existing, proven approaches. We will need to develop new chromatography products with superior performance in order to expand this business. Even if our chromatography products and services are more efficient and of higher quality than alternatives, customers may favor more established products and companies, which would negatively impact our revenues.

Our quarterly operating results may fluctuate significantly due to a number of causes outside our control.

Because the timing of our product orders can vary, we may not be able to reliably predict future revenue and profitability based on quarterly earnings. Our operating results can also vary substantially in any period depending on the mix of products sold. Our quarterly sales and operating results are highly dependent on the volume and timing of orders received during the quarter, as well as the seasonal and cyclical nature of our markets. Historically, a relatively large percentage of our sales have arrived in the last month of each quarter, and often towards the end of such month. Accordingly, a short delay in receiving an order, shipping product, or recognizing revenue from such order may result in substantial quarterly fluctuations in revenue and earnings.

A significant portion of our operating expenses is relatively fixed in nature due to our significant sales, research and development and manufacturing costs. If we cannot adjust spending quickly enough to compensate for a revenue shortfall, this may magnify the adverse impact of such revenue shortfall on our results of operations. As a result, our quarterly operating results could fluctuate, and such fluctuation could cause the market price of our common stock and convertible senior notes to decline. Results from one quarter should not be used as an indication of future performance.

If we are unable to reduce our lengthy sales cycle, our ability to become profitable will be harmed.

Our ability to obtain customers for our products depends in significant part upon the perception that our products and services can help enable protein biomarker discovery, characterization and assay development. From the time we make initial contact with a potential customer until we receive a binding purchase order typically takes between a few weeks to a year or more. Our sales effort requires the effective demonstration of the benefits of our products and may require significant training, sometimes of many different departments within a potential customer. These departments might include research and development personnel and key management. In addition, we may be required to negotiate agreements containing terms unique to each customer. We may expend substantial funds and management effort and may not be able to successfully sell our products or services in a short enough time to achieve profitability.

New product introductions can result in disruptions to our revenue patterns and increased sales and marketing costs, and may involve manufacturing challenges that can negatively impact our gross margin.

We have introduced, and we plan to introduce in the future, new versions of our ProteinChip Systems, Arrays and Software, as well as new chromatography sorbents. New product introductions entail training and educating our customers and prospective customers about the new features, protocols and technology encompassed by the new products. This could disrupt our revenue patterns or

temporarily lengthen our sales cycles to a greater extent than it would at larger companies with broader product offerings. New product introductions may temporarily increase our sales and marketing costs. Manufacturing new products inherently runs the risk that initial costs may be high as new production processes are introduced, and it is possible that new products may involve quality issues that negatively impact our gross margins.

We may need to raise additional capital in the future, and if we are unable to secure adequate funds on terms acceptable to us, we may be unable to execute our business plan.

We currently believe that current cash resources will be sufficient to meet our anticipated financial needs at least through the end of 2005. However, we may need to raise additional capital sooner in order to develop new or enhanced products or services, increase our Biomarker Discovery Center laboratory activities undertaken for our own account, or acquire complementary products, businesses or technologies. If we are unable to obtain financing, or to obtain it on acceptable terms, we may be unable to successfully execute our business plan.

If we are unable to maintain our licensed rights to the SELDI technology, we may lose the right to produce ProteinChip Systems and products based on the SELDI technology and the right to provide services and information related thereto.

Our commercial success depends on our ability to maintain our sublicenses to the SELDI technology. Pursuant to the settlement of the litigation between Ciphergen, Molecular Analytical Systems ("MAS"), LumiCyte and T. William Hutchens, MAS cannot terminate Ciphergen's rights under the sublicenses. However, Baylor College of Medicine has the right to terminate its license with MAS in case of material breach by MAS. If the agreements between Baylor College of Medicine and MAS were terminated and we were unable to obtain a license to these rights from Baylor College of Medicine, we would be precluded from selling any SELDI-based products within the scope of the Baylor SELDI patents, we would no longer generate revenue from the sale of these products and we would have to revise our business direction and strategy.

If we do not effectively manage growth, management attention could be diverted and our ability to increase revenue and achieve profitability could be harmed.

We are expanding our operations, which is placing a strain on our financial, managerial and operational resources. For example, over the last four years we have increased our worldwide sales force and other personnel significantly, with plans for further expansion, and have established Biomarker Discovery Center laboratories with plans to expand their scope and volume of activity. These changes could divert management attention or otherwise disrupt our operations. In order to achieve and manage this growth effectively, we must continue to improve and expand our operational and financial management capabilities and resources. Moreover, we will need to effectively train, integrate, motivate and retain our employees. Our failure to manage our growth effectively could damage our ability to increase revenue and become profitable.

Because our business is highly dependent on key executives and scientists, our inability to recruit and retain these people could hinder our business expansion plans.

Ciphergen is highly dependent on its executive officers, its senior scientists and engineers. Our product development and marketing efforts could be delayed or curtailed if we lose the services of any of these people. To expand our research, product development and sales efforts, we need additional people skilled in areas such as bioinformatics, biochemistry, information services, manufacturing, sales, marketing and technical support. Competition for qualified employees is intense. We will not be able to expand our business if we are unable to hire, train and retain a sufficient number of qualified employees.

If we are unable to successfully expand our limited manufacturing capacity for ProteinChip Readers, arrays and chromatography sorbents, we may encounter manufacturing and quality control problems as we increase our efforts to meet demand.

We currently have only one manufacturing facility at which we produce limited quantities of our ProteinChip Arrays and ProteinChip Readers, and one manufacturing facility at which we produce chromatography sorbents. Some aspects of our manufacturing processes may not be easily scalable to allow for production in larger volumes, resulting in higher than anticipated material, labor and overhead costs per unit. As a result, manufacturing and quality control problems may arise as we increase our level of production. We may not be able to increase our manufacturing capacity in a timely and cost-effective manner and we may experience delays in manufacturing new products. If we are unable to consistently manufacture our products on a timely basis because of these or other factors, we will not be able to meet anticipated demand. As a result, we may lose sales and fail to generate increased revenue and become profitable.

We may experience failure rates for our ProteinChip Systems and Arrays, and for related accessories, that are higher than we anticipated, particularly for newer products being introduced.

Our products and the components used in our products are based on complex technologies and we are currently in the process of developing new versions of certain products. It is difficult to predict the failure rate of new products. If the failure rates for our products are higher than anticipated, we may experience increased warranty claims and increased costs associated with servicing those claims. We may also find it necessary to increase our warranty accrual, resulting in a decreased gross profit.

We face intense competition in our current and potential markets and if our competitors develop new technologies or products, our products may not achieve market acceptance and may fail to capture market share.

Competition in our existing and potential markets is intense and we expect it to increase. Currently, our principal competition comes from

other technologies that are used to perform many of the same functions for which we market our ProteinChip System. The major technologies that compete with our ProteinChip System are liquid chromatography-mass spectrometry and 2D-gel electrophoresis-mass spectrometry. In the life science research market, protein research tools and services are currently provided by a number of companies. In the large-scale chromatography market and the diagnostics market, there are several larger direct competitors. In many instances, our competitors may have substantially greater financial, technical, research and other resources and larger, more established marketing, sales, distribution and service organizations. Additionally, our potential customers may internally develop competing technologies. If we fail to compete effectively with these technologies and products, or if competitors develop significant improvements in protein detection systems, develop systems that are easier to use, or introduce comparable products that are less expensive, our products may not achieve market acceptance and our sales may decrease.

If the government grants a license to the SELDI technology to others, it may harm our business.

Some of the inventions covered by our sublicense agreements with MAS were developed under a grant from an agency of the U.S. government and therefore, pursuant to the Bayh-Dole Act and regulations promulgated thereunder, the government has a paid-up, nonexclusive nontransferable license to those inventions and will be able in limited circumstances to grant a license to others on reasonable terms. We are not aware of any basis for the government to exercise such rights, but if circumstances change and the government exercises such rights, our business could be harmed.

If a competitor infringes our proprietary rights, we may lose any competitive advantage we may have as a result of diversion of management time, enforcement costs and the loss of the exclusivity of our proprietary rights.

Our commercial success depends in part on our ability to maintain and enforce our proprietary rights. We rely on a combination of patents, trademarks, copyrights and trade secrets to protect our technology and brand. In addition to our licensed SELDI technology, we also have submitted patent applications directed to subsequent technological improvements and application of the SELDI technology, including patent applications covering biomarkers that may have diagnostic or therapeutic utility. Our patent applications may not result in additional patents.

If competitors engage in activities that infringe our proprietary rights, our management's focus will be diverted and we may incur significant costs in asserting our rights. We may not be successful in asserting our proprietary rights, which could result in our patents being held invalid or a court holding that the competitor is not infringing, either of which would harm our competitive position. We cannot be sure that competitors will not design around our patented technology.

We also rely upon the skills, knowledge and experience of our technical personnel. To help protect our rights, we require all employees and consultants to enter into confidentiality agreements that prohibit the disclosure of confidential information. These agreements may not provide adequate protection for our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure.

If others successfully assert their proprietary rights against us, we may be precluded from making and selling our products or we may be required to obtain licenses to use their technology.

Our success also depends on avoiding infringing on the proprietary technologies of others. We are aware of third parties whose business involves the use of mass spectrometry for the analysis of proteins and DNA, third parties whose business involves providing chromatography sorbents and media, and third parties whose business involves providing diagnostic tests. Certain of these parties have brought their patents to our attention. If these parties assert claims that we are violating their patents, we may incur substantial costs defending ourselves in lawsuits against charges of patent infringement or other unlawful use of another's proprietary technology. Any such lawsuit may not be decided in our favor, and if we are found liable, we may be subject to monetary damages or injunction against using their technology. We may also be required to obtain licenses under their patents and such licenses may not be available on commercially reasonable terms, if at all.

We rely on single-source suppliers for many components of our ProteinChip Systems, processing services for our ProteinChip Arrays and raw materials for our chromatography sorbents, and if we are unable to obtain these components and raw materials, we would be harmed and our operating results would suffer.

We depend on many single-source suppliers for the necessary raw materials and components required to manufacture our products. We also rely on some single-source subcontractors for certain outsourced manufacturing services. Some of these suppliers are small companies without extensive financial resources. Because of the limited quantities of products we currently manufacture, it is not economically feasible to qualify and maintain alternate vendors for most components of our ProteinChip Readers, processing services for our ProteinChip Arrays and many raw materials for our chromatography sorbents. We have occasionally experienced delays in receiving raw materials, components and services, resulting in manufacturing delays. If we are unable to procure the necessary raw materials, components or services from our current vendors, we will have to arrange new sources of supply and our raw materials and components shipments could be delayed, harming our ability to

manufacture our products, and our ability to sustain or increase revenue could be harmed. As a result, our costs could increase and our profitability could be harmed.

If we fail to maintain certain distribution and patent license agreements, we may have to stop selling certain products and this may harm our revenue.

We sell certain products under either OEM or distribution or patent license agreements. These include arrangements with Beckman Coulter with respect to selling a customized version of the Biomek 2000 Workstation, with Salford Systems with respect to selling Biomarker Patterns software, and with Applied Biosystems / MDS Sciex with respect to selling our ProteinChip Tandem MS Interfaces. If we fail to maintain or extend after their expiration the underlying agreements with these companies, we would have to stop selling these particular products and may have to seek alternate products to sell, as a result of which our sales may be harmed.

If there are reductions in research funding, the ability of our existing and prospective customers to purchase our products could be seriously harmed.

A significant portion of our products are sold to universities, government research laboratories, private foundations and other institutions where funding is dependent upon grants from government agencies, such as the National Institutes of Health. Government funding for research and development has fluctuated significantly in the past due to changes in congressional appropriations. Research funding by the U.S. government or the governments of other countries may be significantly reduced in the future. Any such reductions may seriously harm the ability of our existing and prospective research customers to purchase our products or may reduce the number of ProteinChip Arrays used. Limitations in funding for commercial, biotechnology and pharmaceutical companies and academic institutions that are the potential customers for our ProteinChip Systems and Arrays, and general cost containment pressures for biomedical research may limit our ability to sell our products and services.

If we or our future potential partners fail to comply with FDA requirements, we may not be able to market our products and services and may be subject to stringent penalties; further improvements to our manufacturing operations will be required which may not be accomplished and will entail additional cost.

Currently, the FDA does not actively regulate clinical laboratory tests, or "home brews", that have been developed and used by the laboratory to conduct in-house testing. The FDA does regulate as medical devices the "active ingredients" (known as "analyte specific reagents" or "ASRs") of certain tests developed in-house by clinical laboratories. The FDA's regulations provide that most ASRs are exempt from the FDA's pre-market review requirements. We believe that ASRs that we may provide will fall within those exemptions. However, the FDA has publicly stated it is reevaluating its ASR policy and regulations, and we expect that revisions to these regulations will be implemented in the near future and will have the effect of increasing the regulatory burden on manufacturers of these devices. The commercialization of our products and services could be impacted by being delayed, halted or prevented. If the FDA were to view any of our actions as non-compliant, it could initiate enforcement action such as a regulatory warning letter and possible imposition of penalties. Finally, ASRs that we may provide will be subject to a number of FDA requirements, including compliance with the FDA's Quality System Regulations ("QSRs"), which establish extensive regulations for quality assurance and control as well as manufacturing procedures. Failure to comply with these regulations could result in enforcement action for us or our potential partners. Adverse FDA action in any of these areas could significantly increase our expenses and limit our revenue and profitability. Although we are ISO 9001:2000 certified in our ProteinChip manufacturing processes, we will need to undertake additional steps to bring our operations in line with FDA QSR requirements. Significant additional resources may be required to achieve this quality level. If we are successful in entering the diagnostics market, our

manufacturing facilities will be subject to periodic regulatory inspections by the FDA and other federal and state regulatory agencies. We have not yet been subject to an FDA inspection. We may not satisfy such regulatory requirements, and any such failure to do so would have an adverse effect on our diagnostics efforts.

Our diagnostic efforts may cause us to have significant product liability exposure.

The testing, manufacturing and marketing of medical diagnostics entails an inherent risk of product liability claims. Potential product liability claims may exceed the amount of our insurance coverage or may be excluded from coverage under the terms of the policy. Our existing insurance will have to be increased in the future if we are successful at introducing diagnostic products and this will increase our costs. In the event that we are held liable for a claim against which we are not indemnified or for damages exceeding the limits of our insurance coverage, our liabilities could exceed our total assets.

Business interruptions could limit our ability to operate our business.

Our operations as well as those of the collaborators on which we depend are vulnerable to damage or interruption from computer viruses, human error, natural disasters, power shortages, telecommunication failures, international acts of terror and similar events. We have not

established a formal disaster recovery plan and our back-up operations and our business interruption insurance may not be adequate to compensate us for losses we may suffer. A significant business interruption could result in losses or damages incurred by us and require us to cease or curtail our operations.

Our business is subject to risks from international operations.

We conduct business globally. Accordingly, our future results could be materially adversely affected by a variety of uncontrollable and changing factors including, among others, foreign currency exchange rates; regulatory, political, or economic conditions in a specific country or region; trade protection measures and other regulatory requirements; and natural disasters. Any or all of these factors could have a material adverse impact on our future international business.

We are exposed to fluctuations in the exchange rates of foreign currency.

As a global concern, we face exposure to adverse movements in foreign currency exchange rates. With the acquisition of BioSepra and our 70% ownership interest in Ciphergen Biosystems KK, a significant percentage of our net sales are exposed to foreign currency risk. These exposures may change over time as business practices evolve and could have a material adverse impact on our financial results. The use of the euro as a common currency for members of the European Union could impact our foreign exchange exposure.

Consolidation in the pharmaceutical and biotechnology industries may reduce the size of our target market and cause a decrease in our revenue.

Consolidation in the pharmaceutical and biotechnology industries is generally expected to occur. Planned or future consolidation among our current and potential customers could decrease or slow sales of our technology and reduce the markets our products target. Any such consolidation could limit the market for our products and seriously harm our ability to achieve or sustain profitability.

We may not successfully resolve problems encountered in connection with any future acquisitions or strategic investments.

In July 2001, we acquired the BioSepra process chromatography business from Invitrogen Corporation. In August 2002, we increased our ownership interest in Ciphergen Biosystems KK, the

Japanese joint venture we formed with Sumitomo Corporation in 1999, from 30% to 70%. In the event of any future acquisitions, joint ventures and other strategic investments, we could:

- issue stock that would dilute ownership of our then-existing stockholders;
- incur charges for the impairment of the value of investments or acquired assets; or
- incur amortization expense related to intangible assets.

If we fail to achieve the financial and strategic benefits of past and future acquisitions or strategic investments, our operating results will suffer. Acquisitions and strategic investments involve numerous other risks, including:

- difficulties integrating the acquired operations, technologies or products with ours;
- failure to achieve targeted synergies;
- unanticipated costs and liabilities;
- diversion of management's attention from our core business;
- adverse effects on our existing business relationships with suppliers and customers or those of the acquired organization; and
- potential loss of key employees, particularly those of the acquired organization.

We are subject to environmental laws and potential exposure to environmental liabilities .

We are subject to various federal, state and local environmental laws and regulations that govern our operations, including the handling and disposal of nonhazardous and hazardous wastes, and emissions and discharges into the environment. Failure to comply with such laws and regulations could result in costs for corrective action, penalties or the imposition of other liabilities. We also are subject to laws and regulations that impose liability and clean-up responsibility for releases of hazardous substances into the environment. Under certain of these laws and

regulations, a current or previous owner or operator of property may be liable for the costs of remediating hazardous substances or petroleum products on or from its property, without regard to whether the owner or operator knew of, or caused, the contamination, as well as incur liability to third parties impacted by such contamination. The presence of, or failure to remediate properly, such substances could adversely affect the value and the ability to transfer or encumber such property. Based on currently available information, although there can be no assurance, we believe that such costs and liabilities have not had and will not have a material adverse impact on our financial results.

Anti-takeover provisions in our charter, bylaws and Stockholder Rights Plan and under Delaware law could make a third party acquisition of us difficult.

Our certificate of incorporation, bylaws and Stockholder Rights Plan contain provisions that could make it more difficult for a third party to acquire us, even if doing so might be deemed beneficial by our stockholders. These provisions could limit the price that investors might be willing to pay in the future for shares of our common stock. We are also subject to certain provisions of Delaware law that could delay, deter or prevent a change in control of us.

The rights issued pursuant to our Stockholder Rights Plan will become exercisable the tenth day after a person or group announces acquisition of 15% or more of our common stock or announces commencement of a tender or exchange offer the consummation of which would result in ownership by the person or group of 15% or more of our common stock. If the rights become exercisable, the holders of the rights (other than the person acquiring 15% or more of our common stock) will be

entitled to acquire, in exchange for the rights' exercise price, shares of our common stock or shares of any company in which we are merged, with a value equal to twice the rights' exercise price.

Risks Related to Our Convertible Senior Notes and Common Stock

Substantial leverage and debt service obligations may adversely affect our cash flows.

In connection with the sale of the convertible senior notes (the "notes"), we incurred $30 million of indebtedness. As a result of this indebtedness, our principal and interest payment obligations increased substantially. The degree to which we are leveraged could, among other things:

- make it difficult for us to make payments on the notes;
- make it difficult for us to obtain financing for working capital, acquisitions or other purposes on favorable terms, if at all;
- make us more vulnerable to industry downturns and competitive pressures; and
- limit our flexibility in planning for, or reacting to changes in, our business.

Our ability to meet our debt service obligations will depend upon our future performance, which will be subject to financial, business and other factors affecting our operations, many of which are beyond our control.

The notes are unsecured, and future indebtedness could effectively rank senior to the notes.

The notes are unsecured and will rank equal in right of payment with our existing and future unsecured and unsubordinated indebtedness. The notes will be effectively subordinated to any secured debt to the extent of the value of the assets that secure the indebtedness. The notes will also be "structurally subordinated" to all indebtedness and other liabilities, including trade payables and lease obligations, of our existing and future subsidiaries. In the event of our bankruptcy, liquidation or reorganization or upon acceleration of the notes, payment on the notes could be less, ratably, than on any secured indebtedness. We may not have sufficient assets remaining to pay amounts due on any or all of the notes then outstanding.

The indenture governing the notes does not prohibit or limit us or our subsidiaries from incurring additional indebtedness and other liabilities, or from pledging assets to secure such indebtedness and liabilities. The incurrence of additional indebtedness and, in particular, the granting of a security interest to secure the indebtedness, could adversely affect our ability to pay our obligations on the notes. We anticipate that we may incur additional indebtedness from time to time in the future.

The notes are not protected by restrictive covenants, including financial covenants.

Neither we nor our subsidiaries are restricted from incurring additional debt, including senior debt, or liabilities under the indenture. In addition, the indenture does not restrict us or any of our subsidiaries from paying dividends or issuing or repurchasing securities. If we or our

subsidiaries were to incur additional debt or liabilities, our ability to pay our obligations on the notes could be adversely affected.

We may be unable to repay, repurchase or redeem the notes.

At maturity, the entire outstanding principal amount of the notes will become due and payable by us. Upon a change in control, as defined in the indenture, note holders may require us to repurchase all or a portion of their notes. We may not have enough funds or be able to arrange for additional financing to pay the principal at maturity or to repurchase the notes on a change in control. Future credit agreements or other agreements relating to our indebtedness may restrict the redemption or

repurchase of the notes and provide that a change in control constitutes an event of default. If the maturity date or a change in control occurs at a time when we are prohibited from repaying or repurchasing the notes, we could seek the consent of our lenders to purchase the notes or we could attempt to refinance this debt. If we do not obtain the necessary consents or cannot refinance the debt on favorable terms, or at all, we will be unable to repay or repurchase the notes. Our failure to repay the notes at maturity or repurchase tendered notes would constitute an event of default under the indenture, which might constitute a default under the terms of our other debt. Our obligation to offer to purchase the notes upon a change in control would not necessarily afford note holders protection in the event of a highly leveraged transaction, reorganization, merger or similar transaction involving us.

There may not be an active, liquid market for our common stock or the notes.

There is no guarantee that an active trading market for our common stock will be maintained on the Nasdaq Stock Market's National Market. Investors may not be able to sell their shares quickly or at the latest market price if trading in our stock is not active. An active trading market for the notes may not be maintained. If an active market for the notes is not sustained, the trading price of the notes could decline significantly. The notes are eligible for trading on the PORTAL ^{SM} Market. We do not intend to apply for listing of the notes on any securities exchange.

The notes and the common stock issuable upon conversion of the notes may be subject to restrictions on resale.

We entered into a registration rights agreement with the initial purchasers of the notes, pursuant to which we filed a shelf registration statement covering the resale of the notes and the common stock issuable upon conversion of the notes. If the effectiveness of the registration statement is not maintained, the liquidity and price of the notes and common stock issuable upon conversion of the notes would be adversely affected and note holders could lose all or part of their investment.

At various times during 2003 and 2004, the price at which our common stock could be purchased on the Nasdaq National Market was lower than the conversion price of the notes, and our stock price may be lower than the conversion price in the future.

Prior to electing to convert notes, the note holder should compare the price at which our common stock is trading in the market to the conversion price of the notes. Our common stock trades on the Nasdaq National Market under the symbol CIPH. The initial conversion price of the notes is approximately $9.19 per share. The market prices of our securities are subject to significant fluctuations. Such fluctuations, as well as economic conditions generally, may adversely affect the market price of our securities, including our common stock and the notes.

The notes may not be rated or may receive a lower rating than anticipated.

We believe it is unlikely that the notes will be rated. However, if one or more rating agencies rates the notes and assigns the notes a rating lower than the rating expected by investors, reduces their rating in the future or indicates that it will have their ratings on the notes under surveillance or review with possible negative implications, the market price of the notes and our common stock would be harmed. In addition, a ratings downgrade could adversely affect our ability to access capital.

Our stock price has been highly volatile, and an investment in our stock could suffer a decline in value, adversely affecting the value of the notes or the shares into which those notes may be converted.

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

- actual or anticipated period-to-period fluctuations in financial results;

- failure to achieve, or changes in, financial estimates by securities analysts;
- announcements of new products or services or technological innovations by us or our competitors;
- developments regarding actual or potential discoveries of biomarkers by us or others;
- comments or opinions by securities analysts or major stockholders;
- conditions or trends in the pharmaceutical, biotechnology and life science industries;
- announcements by us of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- developments regarding our patents or other intellectual property or that of our competitors;
- litigation or threat of litigation;
- additions or departures of key personnel;
- sales of our common stock;
- limited daily trading volume; and
- economic and other external factors or disasters or crises.

In addition, the stock market in general, and the Nasdaq National Market and the market for technology companies in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, there has been significant volatility in the market prices of securities of life science companies. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. A securities class action suit against us could result in substantial costs, potential liabilities and the diversion of management's attention and resources.

Future sales of our common stock in the public market could adversely affect the trading price of our common stock, the value of the notes and our ability to raise funds in new stock offerings.

Future sales of substantial amounts of our common stock in the public market, or the perception that such sales are likely to occur, could affect prevailing trading prices of our common stock and the value of the notes. As of December 31, 2003, we had:

- 29,079,593 shares of common stock outstanding;
- 4,054,301 shares of common stock reserved for issuance upon exercise of options outstanding under our stock option plans with a weighted average exercise price of $5.28 per share;
- in addition to the shares reserved for issuance upon the exercise of options referred to in the preceding bullet point, 509,708 shares reserved for future issuance under our stock option plans and employee stock purchase plan; and

- 96,750 shares of common stock potentially issuable to Stanford Research Systems, Inc. under a development contract if certain milestones are met.

Because the notes are convertible into common stock only at a specific conversion price, a decline in our common stock price may cause the value of the notes to decline.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISKS

We maintain investment portfolio holdings of various issuers, types and maturities. These securities are classified as available-for-sale, and consequently are recorded on the balance sheet at fair value with unrealized gains and losses reported as a separate component of accumulated other comprehensive income (loss). These securities are not leveraged and are held for purposes other than trading.

The following discussion about our market risk involves forward-looking statements. We are exposed to market risk related mainly to changes in interest rates. We do not invest in derivative financial instruments.

Interest Rate Sensitivity

The fair value of our investments in marketable securities at December 31, 2003 was $14.5 million, with a weighted-average maturity of 139 days and a weighted-average interest rate of 1.75%.

The primary objective of our investment activities is to preserve principal while at the same time maximizing the income we receive from our investments without significantly increasing risk. We ensure the safety and preservation of our invested principal funds by limiting default risks, market risk and reinvestment risk. To achieve these objectives, we maintain our portfolio of cash equivalents, short-term investments and long-term investments in a variety of securities, including commercial paper, money market funds, government and non-government debt securities, and, by policy, restrict our exposure to any single corporate issuer by imposing concentration limits. We mitigate default risk by investing in high credit- quality securities.

Some of the securities that we invest in may have market risk. That means that a change in prevailing interest rates may cause the fair value of the principal amount of an investment to fluctuate. For example, if we hold a security that was issued with a fixed interest rate at the then-prevailing rate and the prevailing rate rises, the fair value of the principal amount of our investment will probably decline. To minimize the exposure due to adverse shifts in interest rates, we maintain investments at an average maturity of less than one year, with no individual security investment maturing in more than two years.

Our exposure to market risk for changes in interest rates relates primarily to the increase or decrease in the amount of interest income we can earn on our available funds for investment. Our long-term debt and capital lease agreements are at fixed interest rates. We do not plan to use derivative financial instruments in our investment portfolio.

Foreign Currency Exchange Risk

Most of our revenue is realized in U.S. dollars. However, the majority of our revenue from chromatography sorbents is realized in euros. In addition, all our revenue in Japan is realized in Japanese yen. As a result, our financial results could be affected by factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets. Because most of our revenue is currently denominated in U.S. dollars, an increase in the value of the U.S. dollar relative to foreign currencies could make our products less competitive in foreign markets.

The functional currencies of BioSepra S.A. and Ciphergen Biosystems KK are the euro and yen, respectively. Accordingly, the accounts of these operations are translated from the local currency to the U.S. dollar using the current exchange rate in effect at the balance sheet date for the balance sheet accounts, and using the average exchange rate during the period for revenue and expense accounts. The effects of translation are recorded as a separate component of stockholders' equity. The net tangible assets of our non-U.S. operations, excluding intercompany debt, were $12.6 million at December 31, 2003.

The accounts of all other non-U.S. operations are remeasured to the U.S. dollar, which is the functional currency. Accordingly, all monetary assets and liabilities of these foreign operations are translated into U.S. dollars at current period-end exchange rates, and non-monetary assets and related elements of expense are translated using historical rates of exchange. Income and expense elements are translated to U.S. dollars using average exchange rates in effect during the period. Gains and losses from the foreign currency transactions of these subsidiaries are recorded as other income or loss in the statement of operations.

In 2003, we entered into foreign currency contracts to manage the volatility of currency fluctuations as a result of an intercompany loan of approximately $1.0 million, denominated in yen, to our subsidiary in Japan. The effect of exchange rate changes on the forward exchange contracts is expected to offset the effect of exchange rate changes on the intercompany loan. As of December 31, 2003, Ciphergen had one forward contract to sell approximately 107 million Japanese yen at a rate of 106.86 yen per U. S. dollar. Because there is no fixed maturity date for the intercompany loan, we close each forward contract and enter a new one monthly. Net realized foreign currency gains and losses related to the foreign currency forward contracts were not material for the year ended December 31, 2003. Although we will continue to monitor our exposure to currency fluctuations, we cannot provide assurance that exchange rate fluctuations will not harm our business in the future.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Page

Report of Independent Auditors	53
Consolidated Balance Sheets	54
Consolidated Statements of Operations	55
Consolidated Statements of Stockholders' Equity	56
Consolidated Statements of Cash Flows	57
Notes to Consolidated Financial Statements	58
Quarterly Consolidated Financial Data (Unaudited)	78

REPORT OF INDEPENDENT AUDITORS

To the Board of Directors and Stockholders of Ciphergen Biosystems, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Ciphergen Biosystems, Inc. and its subsidiaries at December 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2003 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

PRICEWATERHOUSECOOPERS LLP

San Jose, California
March 9, 2004

CIPHERGEN BIOSYSTEMS, INC.

CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)

	December 31,	
	2003	2002
ASSETS		
Current assets:		
Cash and cash equivalents	$ 32,853	$ 25,145
Short-term investments	14,463	14,713
Accounts receivable, net of allowance for doubtful accounts of $553 and $344, respectively	14,731	13,339
Inventories	8,300	6,850
Notes receivable from related parties	56	288
Prepaid expenses and other current assets	2,878	2,815
Total current assets	73,281	63,150
Property, plant and equipment, net	15,891	13,370
Long-term investments	—	2,683
Goodwill and other intangible assets, net	9,879	7,496
Notes receivable from related parties	216	191
Other long-term assets	2,759	725

Total assets	$ 102,026	$ 87,615
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 5,062	$ 5,421
Accounts payable to related party	—	184
Accrued liabilities	9,495	5,514
Deferred revenue	5,768	3,861
Current portion of capital lease obligations	324	503
Current portion of long-term debt	662	—
Total current liabilities	21,311	15,483
Deferred revenue	594	420
Capital lease obligations, net of current portion	2,274	2,313
Long-term debt, net of current portion	1,090	—
Convertible senior notes, net of discount	27,515	—
Other long term liabilities	1,185	1,013
Total liabilities	53,969	19,229
Commitments and contingencies (Note 10)		
Minority interest	165	32
Stockholders' equity:		
Common stock, $0.001 par value Authorized: 80,000,000 shares at December 31, 2003 and 2002 Issued and outstanding: 29,079,593 shares and 27,341,703 shares at December 31, 2003 and 2002, respectively	29	27
Additional paid-in capital	186,043	174,738
Notes receivable from stockholders	(1,093)	(1,289)
Deferred stock compensation	(725)	(2,829)
Accumulated other comprehensive income	4,158	1,480
Accumulated deficit	(140,520)	(103,773)
Total stockholders' equity	47,892	68,354
Total liabilities and stockholders' equity	$ 102,026	$ 87,615

The accompanying notes are an integral part of these consolidated financial statements.

CIPHERGEN BIOSYSTEMS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share data)

	Years Ended December 31,		
	2003	2002	2001
Revenue:			
Products	$ 50,323	$ 33,563	$ 15,742
Products revenue from related parties	—	827	1,192
Services	8,049	4,910	2,115

Total revenue	58,372	39,300	19,049
Cost of revenue:			
Products	17,020	10,095	5,516
Products revenue from related parties	—	334	434
Services	3,568	2,329	664
Litigation settlement	7,257	—	—
Total cost of revenue	27,845	12,758	6,614
Gross profit	30,527	26,542	12,435
Operating expenses:			
Research and development	24,920	20,754	12,895
Sales and marketing	24,827	20,321	14,301
General and administrative	15,831	15,008	13,020
Amortization of intangible assets	829	829	650
Write-off of acquired in-process technology	—	—	1,000
Total operating expenses	66,407	56,912	41,866
Loss from operations	(35,880)	(30,370)	(29,431)
Interest income	702	1,543	4,125
Interest expense	(857)	(152)	(150)
Other income (expense), net	828	—	(201)
Equity in net loss of joint venture	—	—	(12)
Income attributable to minority interest	(133)	(32)	—
Loss before provision for income taxes	(35,340)	(29,011)	(25,669)
Provision for income taxes	1,407	61	143
Net loss	$ (36,747)	$ (29,072)	$ (25,812)
Net loss per share:			
Basic and diluted	$ (1.31)	$ (1.08)	$ (0.97)
Shares used in computing net loss per share	28,154	26,965	26,512

The accompanying notes are an integral part of these consolidated financial statements.

CIPHERGEN BIOSYSTEMS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in thousands)

	Shares	Amount	Additional Paid-In Capital	Notes Receivable From Stockholders	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total
Balances January 1, 2001	26,784	$ 27	$ 175,694	$ (1,294)	$ (12,362)	$ (24)	$ (48,889)	$ 113,152
Comprehensive loss:								
Net loss	—	—	—	—	—	—	(25,812)	(25,812)
Change in unrealized gain on marketable securities	—	—	—	—	—	204	—	204
Foreign currency translation adjustment	—	—	—	—	—	11	—	11

Total comprehensive loss								(25,597)
Issuances of common stock for services	51	—	268	—	—	—	—	268
Stock options exercised	118	—	183	—	—	—	—	183
Purchase of common stock under employee stock purchase plan	114	—	604	—	—	—	—	604
Repurchase of common stock	(10)	—	(28)	—	—	—	—	(28)
Deferred stock-based compensation	—	—	(1,388)	—	1,388	—	—	—
Amortization of deferred stock-based compensation	—	—	—	—	4,647	—	—	4,647
Balances, December 31, 2001	27,057	27	175,333	(1,294)	(6,327)	191	(74,701)	93,229
Comprehensive loss:								
Net loss	—	—	—	—	—	—	(29,072)	(29,072)
Change in unrealized loss on marketable securities	—	—	—	—	—	(144)	—	(144)
Foreign currency translation adjustment	—	—	—	—	—	1,433	—	1,433
Total comprehensive loss								(27,783)
Issuances of common stock for services	49	—	131	—	—	—	—	131
Stock options exercised	62	—	133	—	—	—	—	133
Purchase of common stock under employee stock purchase plan	176	—	573	—	—	—	—	573
Repurchase of common stock	(2)	—	(6)	—	—	—	—	(6)
Deferred stock-based compensation	—	—	(1,426)	—	1,426	—	—	—
Amortization of deferred stock-based compensation	—	—	—	—	2,072	—	—	2,072
Repayment of note receivable from stockholder	—	—	—	5	—	—	—	5
Balances, December 31, 2002	27,342	27	174,738	(1,289)	(2,829)	1,480	(103,773)	68,354
Comprehensive loss:								
Net loss	—	—	—	—	—	—	(36,747)	(36,747)
Change in unrealized loss on marketable securities	—	—	—	—	—	(66)	—	(66)
Foreign currency translation adjustment	—	—	—	—	—	2,744	—	2,744
Total comprehensive loss								(34,609)
Stock options exercised	172	—	717	—	—	—	—	717
Purchase of common stock under employee stock purchase plan	310	1	835	—	—	—	—	836
Warrants exercised	6	—	—	—	—	—	—	—
Common stock issued to LumiCyte	1,250	1	7,762	—	—	—	—	7,763
Discount on convertible senior notes related to beneficial conversion feature	—	—	2,677	—	—	—	—	2,677
Deferred stock-based compensation	—	—	(686)	—	686	—	—	—
Amortization of deferred stock-based compensation	—	—	—	—	1,418	—	—	1,418
Repayment of note receivable from stockholder	—	—	—	196	—	—	—	196
Balances, December 31, 2003	29,080	$ 29	$ 186,043	$ (1,093)	$ (725)	$ 4,158	$ (140,520)	$ 47,892

The accompanying notes are an integral part of these consolidated financial statements.

CIPHERGEN BIOSYSTEMS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

Years Ended December 31,

	2003	2002	2001
Cash flows from operating activities:			
Net loss	$ (36,747)	$ (29,072)	$ (25,812)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	6,130	4,221	2,723
Write-off of acquired in-process technology	—	—	1,000
Change in minority interest	133	32	—
Stock issued for services	—	131	268
Stock-based compensation expense	1,418	2,072	4,647
Amortization of debt discount	192	—	—
Non-cash portion of litigation settlement	4,257	—	—
Equity in net loss of joint venture	—	—	12
Loss on write-off of fixed assets	114	33	5
Provision for bad debts	211	313	180
Losses on write-down of inventory	691	254	248
Interest accrued on notes receivable from related parties	(84)	(95)	(80)
Capitalized license for intellectual property	(613)	—	—
Changes in operating assets and liabilities, net of assets acquired and liabilities assumed in business combinations:			
Accounts receivable	(930)	(6,588)	(1,376)
Accounts receivable from related parties	—	128	(53)
Inventories	(929)	(2,222)	(416)
Prepaid expenses and other current assets	105	(402)	(507)
Other long-term assets	(121)	282	(53)
Accounts payable and accrued liabilities	3,027	2,371	2,474
Accounts payable to related party	(184)	37	134
Deferred revenue	2,140	1,249	1,440
Deferred revenue from related parties	—	(319)	(39)
Other long-term liabilities	(69)	311	565
Net cash used in operating activities	(21,259)	(27,264)	(14,640)
Cash flows from investing activities:			
Purchase of property, plant and equipment	(6,350)	(4,364)	(4,070)
Acquisition of BioSepra, net of cash acquired	—	—	(12,257)
Purchase of marketable securities	(10,639)	(10,068)	(36,937)
Maturities of marketable securities	13,224	21,017	8,336
Repayment of notes receivable from related party	230	—	—
Net cash acquired upon purchase of Ciphergen Biosystems KK common stock	—	872	—
Net cash provided by (used in) investing activities	(3,535)	7,457	(44,928)
Cash flows from financing activities:			
Repurchases of common stock	—	(6)	(28)
Proceeds from exercises of stock options and warrants	717	133	183
Proceeds from issuance of common stock under employee stock purchase plan	836	573	604
Repayment of stockholder note	196	5	—
Principal payments on capital lease obligations	(684)	(447)	(326)
Proceeds from long-term debt	32,066	—	—
Issuance costs of convertible senior notes	(1,866)	—	—
Repayments of long-term debt	(313)	(117)	(183)
Repayments of working capital loans for Ciphergen Biosystems KK to Sumitomo	—	(3,960)	—
Net cash provided by (used in) financing activities	30,952	(3,819)	250
Effect of exchange rate changes	1,550	452	4
Net increase (decrease) in cash and cash equivalents	7,708	(23,174)	(59,314)
Cash and cash equivalents, beginning of year	25,145	48,319	107,633

Cash and cash equivalents, end of year	$ 32,853	$ 25,145	$ 48,319
Supplemental cash flow information:			
Cash paid for interest	$ 173	$ 147	$ 161
Cash paid for income taxes	62	21	—
Supplemental schedule of non-cash investing and financing activities:			
Acquisition of property and equipment under capital leases	21	5	—
Transfer of fixed assets to inventory	618	244	301

The accompanying notes are an integral part of these consolidated financial statements.

CIPHERGEN BIOSYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Summary of Significant Accounting Policies

The Company

Ciphergen Biosystems, Inc. (the "Company" or "Ciphergen") develops, manufactures and sells ProteinChip® Systems for life science researchers. The core technology, which is patented, is Surface Enhanced Laser Desorption/Ionization ("SELDI"). The systems consist of ProteinChip Readers, ProteinChip Software and related accessories, which are used in conjunction with consumable ProteinChip Arrays. These products are sold primarily to biologists at pharmaceutical and biotechnology companies, and academic and government research laboratories. The Company also provides research services through its Biomarker Discovery Center® laboratories and process proteomics centers, and chromatography sorbents used for protein purification through its BioSepra® subsidiary.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America and include the accounts of the Company and its subsidiaries. All intercompany transactions have been eliminated in consolidation. The Company reported its 30% ownership interest in Ciphergen Biosystems KK, a joint venture in Japan, using the equity method of accounting through August 31, 2002, at which time the Company acquired a 70% majority interest and began consolidation of Ciphergen Biosystems KK, with the noncontrolling interest being reported as minority interest in the consolidated balance sheet and statement of operations.

Use of Estimates

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

Certain Risks and Uncertainties

The Company's products and services are currently concentrated in a single segment of the life science research field, which is characterized by rapid technological advances and changes in customer requirements. The success of the Company depends on management's ability to anticipate and to respond quickly and adequately to technological developments in its industry, changes in customer requirements and changes in industry standards. Any significant delays in the development or introduction of new products or services could have a material adverse effect on the Company's business and operating results.

The Company licenses certain technologies that are used in products that represent substantially all of its revenues. An inability to retain such technology licenses could result in a material adverse effect to the Company. Additionally, some of the raw materials and components used in its products are from single-source suppliers. If the Company is unable to obtain such raw materials and components, its financial condition and operating results could be significantly impacted.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

Investments

Management determines the appropriate classification of the Company's investments in marketable debt securities at the time of purchase, and re-evaluates this designation at each balance sheet date. The Company classifies all securities as "available-for-sale" and carries them at fair value with unrealized gains or losses related to these securities included as a component of other comprehensive income until realized. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income. Realized gains and losses are determined using the specific identification method. The cost of securities sold is based on the specific identification method.

The Company's investment objectives include the safety and preservation of invested funds and liquidity of investments that is sufficient to meet cash flow requirements. Cash, cash equivalents and investments in debt securities are with high credit-quality financial institutions, commercial companies and government agencies in order to limit the amount of credit exposure.

Fair Value of Financial Instruments

The estimated fair value of financial instruments has been determined using available market information or other appropriate valuation methodologies. However, considerable judgment is required in interpreting market data to develop estimates of fair value; therefore, the estimates are not necessarily indicative of the amounts that could be realized or would be paid in a current market exchange. The effect of using different market assumptions and/or estimation methodologies may be material to the estimated fair value amounts.

The carrying amounts of certain of the Company's financial instruments including cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate fair value due to their short maturities. The carrying value of the capital leases approximates their fair value based on the borrowing rates currently available to the Company for loans with similar terms. The fair value of the equipment financing loan was estimated by discounting the future cash flows using applicable spreads to approximate current interest rates available to the Company. Convertible senior notes have an estimated fair value based on quoted market prices. The fair values of the equipment financing loan and the convertible senior notes as compared to their book values as of December 31, 2003 were as follows (in thousands):

	Book Value	Fair Value
Equipment financing loan	$ 1,752	$ 1,752
Convertible senior notes	27,515	32,400
	$ 29,267	$ 34,152

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash and cash equivalents and accounts receivable. Most of the Company's cash and cash equivalents as of December 31, 2003 were deposited with financial institutions in the U.S. and exceeded federally

insured amounts. The Company also maintains cash deposits with banks in Western Europe, Canada, China and Japan. The Company has not experienced any losses on its deposits of cash and cash equivalents.

The Company's accounts receivable are derived from sales made to customers located in North America, Europe and Asia. The Company performs ongoing credit evaluations of its customers' financial condition and generally does not require collateral. The Company maintains an allowance for doubtful accounts based upon the expected collectibility of accounts receivable. No customer accounted for more than 10% of revenue in 2003 or 2002.

Inventories

Inventories are stated at the lower of standard cost, which approximates cost on a first-in, first-out basis, or market value.

Property, Plant and Equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization are computed for financial reporting purposes principally using the straight-line method over the following estimated useful lives: machinery and equipment, 2-8 years; computer equipment and software, 3-4 years; furniture and fixtures, 3-10 years; buildings and leasehold improvements, the lesser of their economic life or the term of the underlying lease. Assets being installed or under construction are shown as construction in progress. Construction in progress is valued based on expenditures incurred up to the balance sheet date. When the constructed asset is ready for its intended purpose, the total cost is transferred to the relevant asset class and depreciation commences. The cost of repairs and maintenance is charged to operations as incurred. Gains and losses resulting from disposals of assets are reflected in the year of disposition.

Goodwill and Other Intangible Assets

Goodwill represents the excess of the purchase price over the estimated fair value of the tangible and intangible net assets acquired in the Company's acquisitions of IllumeSys Pacific, Inc. in 1997, Ciphergen Technologies, Inc. in 1998, BioSepra S.A. in 2001 and Ciphergen Biosystems KK in 2002. Prior to the adoption of Statement of Financial Accounting Standards No. 142 ("SFAS 142"), "Goodwill and Other Intangible Assets", on January 1, 2002, goodwill was being amortized on a straight-line basis over five years.

Goodwill is reviewed for impairment at least annually and in the interim whenever events or changes in circumstances indicate that the carrying amount of goodwill may be impaired. Upon adoption of SFAS 142, the Company performed a transitional goodwill impairment assessment and noted no such impairment of goodwill.

Other intangible assets consist of patents and developed product technology arising from the acquisition of the BioSepra business, as well as a technology license acquired in connection with the settlement of litigation in 2003. These intangibles are being amortized on a straight-line basis over their estimated useful lives of seven years in the case of the patents and developed product technology and 17 years in the case of the technology license. They are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may no longer be recoverable.

Long-lived Assets

Long-lived assets, such as property, plant and equipment and purchased intangible assets, are reviewed for impairment when events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of an asset group's carrying amount to future net undiscounted cash flows the asset group is expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the projected discounted future net cash flows arising from the assets. Other long-term assets consist primarily of the offering costs of the convertible senior notes and security deposits for the Company's leased facilities.

Revenue Recognition

Revenue from product sales is recognized upon product shipment, provided no significant obligations remain and collection of the receivables are deemed probable. Revenue from shipping and handling is generally recognized upon product shipment, based on the amount billed to customers for shipping and handling. The related cost of shipping and handling is included in cost of revenue upon product shipment.

The Company generally offers a standard warranty in the form of a maintenance contract on each ProteinChip System, ProteinChip Tandem MS Interface and accessory shipped. These typically include coverage for parts, labor and software bug fixes for a specified period, typically one year. Revenue related to these maintenance contracts is deferred and recognized over the maintenance contract period. Related costs are expensed as incurred. Factors that affect the Company's warranty costs include the number of installed units, historical and anticipated rates of warranty claims, and cost per claim. Revenue from separately priced maintenance (extended warranty) contracts is deferred and recognized over the maintenance contract period. Related costs are expensed as incurred.

Revenue from research contracts is recognized as the work is performed, based on the achievement of substantive milestones described in the contracts. Revenue from up-front payments is deferred and recognized ratably over the expected term of the research contract.

For revenue arrangements with multiple elements that are delivered at different points in time (for example, where Ciphergen has delivered the hardware and software but is also obligated to provide services, maintenance and/or training), the Company evaluates whether the delivered elements have standalone value to the customer, whether the fair value of the undelivered elements is reliably determinable, and whether the delivery of the remaining elements is probable and within the Company's control. When all these conditions are met, the Company recognizes revenue on the delivered elements. If any one of these conditions is not met, the Company defers the recognition of revenue until all these conditions are met or all elements have been delivered. Fair values for ongoing maintenance are based upon separate sales of renewals to other customers. Fair values for services, such as training or consulting, are based upon separate sales by the Company of those services to other customers.

Research and Development Costs

Research and development expenditures are charged to operations as incurred. Research and development costs consist primarily of payroll and related costs, materials and supplies used in the development of new products, and fees paid to consultants and outside service providers. Software development costs incurred in the research and development of new products are expensed as incurred

until technological feasibility is established. To date, products and upgrades have generally reached technological feasibility and have been released for sale at substantially the same time.

Advertising Costs

The Company expenses advertising costs as incurred. Advertising costs were $232,000 in 2003, $354,000 in 2002 and $313,000 in 2001.

Stock-based Compensation

The Company accounts for its stock-based employee compensation arrangements using the intrinsic value method of accounting. Unearned compensation expense is based on the difference, if any, on the date of the grant between the fair value of the Company's stock and the exercise price. Unearned compensation is amortized and expensed using an accelerated method. The Company accounts for stock issued to non-employees using the fair value method of accounting.

Had compensation expense for options granted to employees, officers and directors been determined based on fair value at the grant date, the Company's net loss per share would have increased to the pro forma amounts indicated below (in thousands, except per share data):

	Years Ended December 31,		
	2003	2002	2001
Net loss as reported	$ (36,747)	$ (29,072)	$ (25,812)
Add: Employee stock-based compensation expense in reported net income, net of tax	1,368	2,148	4,695
Less: Employee stock-based compensation expense determined under the fair value method, net of tax	(4,782)	(4,927)	(6,724)
Pro forma net loss	$ (40,161)	$ (31,851)	$ (27,841)
Basic and diluted net loss per share:			
As reported	$ (1.31)	$ (1.09)	$ (0.97)
Pro forma	$ (1.43)	$ (1.18)	$ (1.05)

The value of each option grant was estimated on the date of grant using the Black-Scholes option-pricing model in 2003, 2002 and 2001 with the following weighted assumptions:

	Stock Option Plan			Employee Stock Purchase Plan		
	2003	2002	2001	2003	2002	2001
Assumptions:						
Risk-free interest rate	2.7%	4.1%	4.6%	1.1%	1.3%	2.5%
Expected life	5 years	5 years	5 years	0.5 year	0.5 year	0.5 year
Expected volatility	69%	60%	75%	69%	60%	75%
Expected dividend yield	—	—	—	—	—	—
Weighted average fair values:						
Exercise price less than market price	$ —	$ —	$ —	$ 1.13	$ 1.11	$ 2.13
Exercise price equal to market price	3.61	2.53	4.10	—	—	—
Exercise price greater than market price	—	—	—	—	—	—

The expected average life is based on the assumption that stock options on average are exercised 5 years after they are granted. The risk-free interest rate was calculated in accordance with the grant date and expected average life.

Income Taxes

The Company accounts for income taxes using the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and the tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. A valuation allowance is established when necessary to reduce deferred tax assets to the amounts expected to be realized.

Foreign Currency Translation

The functional currencies of BioSepra S.A. and Ciphergen Biosystems KK are the euro and yen, respectively. Accordingly, all balance sheet accounts of these operations are translated into U.S. dollars using the current exchange rates in effect at the balance sheet date, and revenues and expenses are translated using the average exchange rates in effect during the period. The gains and losses from foreign currency translation of these subsidiaries' financial statements are recorded directly into a separate component of stockholders' equity under the caption "Accumulated other comprehensive income."

The functional currency of all other non-U.S. operations is the U.S. dollar. Accordingly, all monetary assets and liabilities of these foreign operations are translated into U.S. dollars at current period-end exchange rates and non-monetary assets and related elements of expense are translated using historical rates of exchange. Income and expense elements are translated to U.S. dollars using average exchange rates in effect during the period. Gains and losses from the foreign currency transactions of these subsidiaries are recorded as other income or loss in the statement of operations, and were not material for all years presented.

Recent Accounting Pronouncements

In November 2002, the Emerging Issues Task Force ("EITF") reached a consensus on Issue No. 00-21 ("EITF 00-21"), "Revenue Arrangements with Multiple Deliverables." EITF 00-21 provides guidance on how to account for arrangements that involve the delivery or performance of multiple products, services and/or rights to use assets. The provisions of EITF 00-21 apply to revenue arrangements entered into in fiscal periods beginning after June 15, 2003, with earlier application permitted. The Company adopted EITF 00-21 on January 1, 2003, which did not have a material impact on the Company's consolidated financial position, consolidated results of operations or consolidated cash flows.

In May 2003, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards No. 150 ("SFAS 150"), "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS 150 established standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. SFAS 150 was effective for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003. The adoption of SFAS 150 did not have a material impact on the Company's consolidated financial position, consolidated results of operations or consolidated cash flows.

In May 2003, the EITF reached a consensus on Issue No. 03-5, "Applicability of AICPA Statement of Position 97-2, Software Revenue Recognition, to Non-Software Deliverables in an Arrangement Containing More-Than-Incidental Software." The FASB ratified this consensus in August 2003. EITF Issue No. 03-5 affirms that AICPA Statement of Position 97-2 applies to non-software deliverables, such as hardware, in an arrangement if the software is essential to the functionality of the non-software deliverables. The adoption of EITF Issue No. 03-5 did not have a material impact on the Company's consolidated financial position, consolidated statement of operations or consolidated cash flows.

In December 2003, the SEC issued Staff Accounting Bulletin ("SAB") No. 104, "Revenue Recognition", which codifies, revises and rescinds certain sections of SAB No. 101, "Revenue Recognition", in order to make this interpretive guidance consistent with current authoritative accounting and auditing guidance and SEC rules and regulations. The changes noted in SAB No. 104 did not have a material effect on the Company's consolidated financial position, consolidated results of operations or consolidated cash flows.

2. Marketable Securities

Marketable securities, which are classified as available-for-sale, are summarized as follows (in thousands):

	December 31, 2003

	Amortized Cost	Gross Unrealized Losses	Aggregate Fair Value
Corporate debt securities maturing:			
Within one year	$ 12,358	$ (7)	$ 12,351
Between one to five years	—	—	—
Other investments maturing within one year	2,112	—	2,112
	$ 14,470	$ (7)	$ 14,463

	December 31, 2002		
	Amortized Cost	Gross Unrealized Gains	Aggregate Fair Value
U.S. Treasury securities and debt securities of U.S. government agencies maturing within one year	$ 3,008	$ 5	$ 3,013
Corporate debt securities maturing:			
Within one year	9,617	34	9,651
Between one to five years	2,663	20	2,683
Other investments maturing within one year	2,049	—	2,049
	$ 17,337	$ 59	$ 17,396

During 2003 and 2002, no marketable securities were sold prior to maturity.

3. Inventories (in thousands)

	December 31,	
	2003	2002
Raw materials	$ 2,791	$ 1,917
Work in progress	1,320	1,610
Finished goods	4,189	3,323
	$ 8,300	$ 6,850

4. Property, Plant and Equipment, Net (in thousands)

	December 31,	
	2003	2002
Land	$ 499	$ 417
Buildings and improvements	3,646	3,044
Machinery and equipment	16,901	13,314
Leasehold improvements	4,388	3,119
Computers and equipment	2,291	1,910
Furniture and fixtures	1,053	912
Construction in progress	767	—
	29,545	22,716
Less: Accumulated depreciation and amortization	(13,654)	(9,346)
	$ 15,891	$ 13,370

Property, plant and equipment includes $4,146 and $3,461 of land, buildings and improvements under capital leases at December 31, 2003 and 2002, respectively. Property, plant and equipment also includes $234 and $1,108 of machinery and equipment under capital leases at December 31, 2003 and 2002, respectively. Accumulated amortization of assets under capital leases totaled $1,037 and $1,171 at December 31, 2003 and 2002, respectively.

Construction in progress at December 31, 2003 represented manufacturing equipment being built and installed at the Company's Fremont, California facility to automate certain processes in the production of ProteinChip Arrays. The automated manufacturing system is expected to be fully operational by the end of 2004.

Depreciation expense for property, plant and equipment was $4,112 in 2003, $3,076 in 2002 and $2,082 in 2001.

5. Goodwill and Other Intangible Assets

The Company adopted SFAS 142 on January 1, 2002 for all goodwill and other intangible assets. As a result, goodwill is no longer amortized but rather tested for impairment at least annually and in the interim whenever circumstances indicate that goodwill may be impaired. Upon adoption, the Company performed a transitional goodwill impairment assessment and noted no such impairment of goodwill. The Company also performed annual impairment tests in 2002 and 2003, and determined that

no impairment had occurred. Goodwill and other intangible assets consisted of the following (in thousands):

	December 31, 2003			December 31, 2002		
	Gross Carrying Amount	Accumulated Amortization	Total	Gross Carrying Amount	Accumulated Amortization	Total
Non-amortizing:						
Goodwill	$ 2,870	$ —	$ 2,870	$ 2,870	$ —	$ 2,870
Amortizing:						
Acquired completed technology	5,400	1,865	3,535	5,400	1,093	4,307
Patents	400	138	262	400	81	319
Acquired license related to litigation settlement	4,118	906	3,212	—	—	—
	$ 12,788	$ 2,909	$ 9,879	$ 8,670	$ 1,174	$ 7,496

Annual amortization expense for these intangible assets is expected to be approximately $2,038,000 in 2004 and in 2005; $1,621,000 in 2006; $829,000 in 2007; and $483,000 in 2008. Amortization expense for goodwill and other intangible assets was (in thousands):

	2003	2002	2001
Goodwill	$ —	$ —	$ 304
Acquired completed technology	772	772	322
Patents	57	57	24
Acquired license related to litigation settlement	906	—	—
	$ 1,735	$ 829	$ 650

The acquired license is amortized to cost of revenue. It is related to the litigation settlement between Ciphergen and Molecular Analytical Systems, Inc. ("MAS"), LumiCyte, Inc. ("LumiCyte"), and T. William Hutchens. As part of the settlement:

(a) Ciphergen paid LumiCyte $3.0 million in cash;

(b) Ciphergen issued to LumiCyte 1,250,000 shares of Ciphergen common stock which were valued at $7.8 million; and

(c) Ciphergen agreed to pay license fees to MAS based on the revenues Ciphergen and its affiliates derive from the SELDI technology and recognize between February 21, 2003 and May 28, 2014, provided that such license fees will not exceed $1.0 million during calendar year 2003 or $10.0 million in the aggregate.

The total cost of the litigation settlement amounted to $20.8 million, of which $7.3 million was attributed to periods prior to April 1, 2003 and expensed in the second quarter of 2003. $906,000 was amortized to cost of revenue in the remainder of 2003, and the remaining $12.6 million will be amortized to cost of revenue in future periods through the second quarter of 2014.

Pro forma net loss (in thousands) and pro forma net loss per share, excluding amortization expense for goodwill, were:

	Years Ended December 31,		
	2003	2002	2001
Net loss, as reported	$ (36,747)	$ (29,072)	$ (25,812)
Add back goodwill amortization	—	—	304
Pro forma net loss	$ (36,747)	$ (29,072)	$ (25,508)
Basic and diluted net loss per share, as reported	$ (1.31)	$ (1.08)	$ (0.97)
Add back goodwill amortization	—	—	0.01
Pro forma basic and diluted net loss per share	$ (1.31)	$ (1.08)	$ (0.96)

6. Accrued Liabilities (in thousands)

	December 31,	
	2003	2002
Payroll and related expenses	$ 4,722	$ 3,659
Legal and accounting fees	1,025	754
Rent and related liabilities	—	137
Tax-related liabilities	2,344	451
Accrued interest on convertible senior notes	484	—
Other accrued liabilities	920	513
	$ 9,495	$ 5,514

7. Warranties and Maintenance Contracts

Ciphergen has a direct field service organization that provides service for its products. The Company generally includes a standard 12 month warranty on its ProteinChip Systems, ProteinChip Tandem MS Interfaces and accessories in the form of a maintenance contract upon initial sale, after which maintenance and support may be provided under a separately priced contract or on an individual call basis.

Changes in product warranty obligations, including separately priced maintenance obligations, during the years ended December 31, 2003 and 2002 were as follows (in thousands):

	2003	2002
Balance at beginning of period	$ 1,800	$ 1,096
Add: Costs incurred for maintenance contracts	2,009	1,299
Revenue deferred for separately priced maintenance contracts	5,221	2,737
Less: Settlements made under maintenance contracts	(2,009)	(1,299)
Revenue recognized for separately priced maintenance contracts	(3,579)	(2,033)
Balance at end of period	$ 3,442	$ 1,800

Revenue for maintenance contracts is recognized on a straight line basis over the period of the applicable maintenance contract. Costs are recognized as incurred.

8. Long-term Debt and Capital Leases

Convertible Senior Notes

On August 22, 2003, the Company closed the sale of $30.0 million of convertible senior notes due September 1, 2008. Offering costs were approximately $1.8 million. Interest on the notes is 4.5% per annum on the principal amount, payable semiannually on March 1 and September 1, beginning March 1, 2004. The notes are convertible, at the option of the holder, at any time on or prior to maturity of the notes into shares of the Company's common stock initially at a conversion rate of 108.8329 shares per $1,000 principal amount of the notes, which is equal to a conversion price of approximately $9.19 per share. The conversion price, and hence the conversion rate, is subject to adjustment upon the occurrence of certain events, such as stock splits, stock dividends and other distributions or recapitalizations. Because the market value of the stock rose above the conversion price between the day the notes were priced and the closing date, the Company recorded a discount of $2,677,000 related to the intrinsic value of the beneficial conversion feature resulting from this price change and the fact that the initial purchaser of the notes was not required to purchase the notes until the closing date. Immediately after the closing, Ciphergen common stock had a market price of $10.01 per share, or $0.82 per share higher than the conversion price. The value of the beneficial conversion feature was determined by multiplying this difference in the per share price of Ciphergen's common stock by the 3,264,987 underlying shares. This amount will be amortized to interest expense using the effective interest method over the five-year term of the notes, or shorter period in the event of conversion of the notes. Amortization in 2003 amounted to $192,000.

The notes are the Company's senior unsecured obligations and rank on parity in right of payment with all of the Company's existing and future senior unsecured debt and rank senior to the Company's existing and future debt that expressly provides that it is subordinated to the notes. The notes are also effectively subordinated in right of payment to the Company's existing and future secured debt, to the extent of such security, and to its subsidiaries' liabilities. The indenture does not limit the incurrence by the Company or its subsidiaries of other indebtedness.

The Company may redeem the notes at its option, in whole or in part, at any time on or after September 1, 2006 at specified redemption prices plus accrued and unpaid interest, provided that the notes will be redeemable only if the closing price of the stock equals or exceeds 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of the notice of the redemption. The 3,264,987 shares that could be issued if all convertible senior notes were converted into common stock have not been included in the calculation of loss per share, as these potential common shares are antidilutive. Upon a change of control, each holder of the notes may require the Company to repurchase some or all of the notes at specified redemption prices, plus accrued and unpaid interest. The debenture contains a put option that entitles the holder to require the Company to redeem the debenture at a price equal to 110% of the principal balance upon a change in control of the Company prior to August 31, 2004 (107.5% from September 1, 2004 through August 31, 2005 and 105.0% thereafter). The Company does not anticipate that the put option will have significant value because no change of control is currently contemplated.

Equipment Financing Loan

In June 2003, the Company entered into a loan and security agreement with General Electric Capital Corporation to obtain financing for up to $5.0 million of capital equipment purchases. The loan

is collateralized by the equipment being financed as well as certain other assets of the Company. As of December 31, 2003, the Company had financed $2.1 million of capital equipment purchases through this facility at an annual interest rate of 7.48%, repayable in monthly installments over 36 months from the date of each drawdown under the agreement. As of December 31, 2003, the balance outstanding on the loan, including interest charges, was $1.9 million, with the final payment scheduled for July 1, 2006. The Company may utilize the remaining balance of this facility to purchase additional capital equipment no later than June 30, 2004.

Capital Leases

The Company leases its facility in France under a capital lease with an independent finance company, which expires on February 3, 2011. Upon expiration, the Company may acquire the facility for a nominal amount. The Company also leases certain machinery and equipment in Japan under capital lease agreements with Sumitomo Corporation and other independent finance companies; these leases expire at various times through March 31, 2008. The interest rate on one capital lease is variable based on the Euribor rate; the others are fixed rates. The weighted average interest rate was 3.9% at December 31, 2003.

As of December 31, 2003, future minimum lease payments under capital lease agreements were as follows (in thousands):

2004	$ 421

2005	408
2006	407
2007	410
2008	411
2009 and after	937
Total minimum lease payments	2,994
Less: amount representing interest	(396)
Present value of minimum lease payments	2,598
Less: Current portion	(324)
Non-current portion	$ 2,274

9. Foreign Currency Contracts

During the year ended December 31, 2003, the Company entered into foreign currency forward contracts to manage the volatility of currency fluctuations as a result of an intercompany loan of approximately $1.0 million, denominated in yen, to the Company's subsidiary in Japan. The effect of exchange rate changes on the forward exchange contracts is expected to offset the effect of exchange rate changes on the intercompany loan. As of December 31, 2003, the Company had one forward contract to sell approximately 107 million Japanese yen at a rate of 106.86 yen per U.S. dollar. Because there is no fixed maturity date for the intercompany loan, the Company closes each forward contract and enters a new one monthly. Net realized foreign currency gains and losses related to the foreign currency forward contracts are recorded in other income (expense) in the Consolidated Statements of Operations and were not material for the year ended December 31, 2003.

10. Commitments and Contingencies

Operating Leases

The Company leases various equipment and facilities to support its worldwide manufacturing, research and development, Biomarker Discovery Center, and sales and marketing activities. Total rent expense under all leases, net of sublease income, was $3,514,000, $2,828,000 and $1,791,000 in the years ended December 31, 2003, 2002 and 2001, respectively. The Company leases its Fremont facility under a non-cancelable operating lease that expires on July 31, 2008. The lease provides for escalations of lease payments of approximately 4% per year. Sublease income paid by a tenant at the Company's Fremont facility was $0 in 2003, $475,000 in 2002 and $1,583,000 in 2001.

As of December 31, 2003, future minimum payments under non-cancelable operating leases, exclusive of sublease income, were as follows (in thousands):

2004	$ 3,982
2005	3,765
2006	3,408
2007	3,280
2008	2,766
	$ 17,201

In March 2004, the Company entered into a six-year lease agreement for an office and lab in the U.K. Total payments will be approximately $811,000 over the life of the lease.

Inventory Purchase Obligations

The Company has non-cancelable agreements with certain vendors obligating Ciphergen to purchase approximately $1 million of inventory during 2004.

Joint Development Agreement

In February 1995, the Company entered into a joint development agreement with Stanford Research Systems which was amended in June 2000. It provided for the issuance of a total of 949,113 shares of Series B preferred stock upon achievement of specified development milestones. All preferred stock converted to common stock on a one-for-one basis on September 26, 2000 in conjunction with the Company's

initial public offering. Through December 31, 1999, a total of 712,613 shares of preferred stock were issued under the agreement. During 2000, two additional milestones were attained and 25,800 shares of preferred stock valued at $379,000 and 12,900 shares of common stock valued at $142,000 were issued, respectively. In 2001, a total of 51,600 common shares valued at $268,000 were issued upon the attainment of four additional milestones. In 2002, 49,450 common shares valued at $131,000 were issued upon completion of a milestone. No shares were issued pursuant to this agreement in 2003. The remaining 96,750 shares will be issued as common stock upon the achievement of additional milestones. The value of these shares was recorded as research and development expense when the development milestones were achieved.

11. Stockholders' Equity

At December 31, 2003 and 2002, 5,000,000 shares of preferred stock were authorized, but no shares were issued or outstanding.

12. Stock Options, Warrants and Employee Stock Purchase Plan

1993 Stock Option Plan

The Company has no shares of common stock reserved for sale to employees, directors or consultants under its 1993 Stock Option Plan (the "1993 Plan"). Under the 1993 Plan, options were granted at prices not lower than 85% and 100% of the fair market value of the common stock for nonstatutory and statutory stock options, respectively. Options are exercisable when granted and such unvested shares are subject to repurchase upon termination of employment. Should the employment of the holders of common stock subject to repurchase terminate prior to full vesting of the outstanding shares, the Company may repurchase all unvested shares at a price per share equal to the original exercise price. Options generally vest monthly over a period of five years. At December 31, 2003, a total of approximately 65,000 shares of common stock were subject to repurchase by the Company at a weighted average repurchase price of $2.86 per share. Unexercised options generally expire ten years from the date of grant (five years for incentive stock options granted to holders of more than 10% of the Company's common stock). Since the Company's IPO, no options have been granted under the 1993 Plan. During 2001, 2002 and 2003, options for 117,553, 59,427 and 84,731 shares were exercised, respectively. Options for 137,621, 80,113 and 24,319 shares were canceled during 2001, 2002 and 2003, respectively, and the shares reserved under the 1993 Plan were reduced by the same amount.

2000 Stock Plan

In April 2000, the stockholders approved the 2000 Stock Plan (the "2000 Plan"). At December 31, 2003, the Company had 494,254 shares of common stock reserved for sale to employees, directors and consultants under this stock option plan. Under the 2000 Plan, options may be granted at prices not lower than 85% and 100% of the fair market value of the common stock for nonstatutory and statutory stock options, respectively. Options generally vest monthly over a period of five years. During 2001, options for 1,105,100 shares were granted and options for 41,517 shares were canceled. No options were exercised in 2001. During 2002, options for 1,183,400 shares were granted, options for 2,666 shares were exercised, and options for 126,634 shares were canceled. During 2003, options for 1,221,950 shares were granted, options for 87,450 shares were exercised, and options for 186,553 shares were canceled.

On January 1, 2003 and 2004, an additional 1,100,000 and 1,400,000 shares were reserved for issuance under the 2000 Plan, respectively.

Activity under these two stock option plans was as follows (in thousands, except per share data):

		Options Outstanding			
	Shares Available For Grant	Number of Shares	Price Per Share	Aggregate Price	Weighted Average Exercise Price
Balances, December 31, 2000	$ 1,140	$ 1,492	$ 0.12-3.49	$ 4,564	$ 3.06
Shares reserved for the 2000 Plan	325				
Reduction in shares reserved	(213)				
Options granted	(1,105)	1,105	2.99-8.50	7,022	6.35
Options canceled/shares repurchased	189	(179)	1.16-8.50	(733)	4.10
Options exercised	—	(118)	0.12-3.49	(183)	1.55
Balances, December 31, 2001	336	2,300	0.23-8.50	10,670	4.61
Shares reserved for the 2000 Plan	1,150				
Reduction in shares reserved	(82)				

Options granted	(1,183)	1,183	3.10-5.98	5,464	4.62
Options canceled/shares repurchased	209	(206)	1.16-8.50	(961)	4.65
Options exercised	—	(62)	0.23-5.78	(133)	2.14
Balances, December 31, 2002	430	3,215	0.23-8.50	15,040	4.68
Shares reserved for the 2000 Plan	1,100				
Reduction in shares reserved	(25)				
Options granted	(1,222)	1,222	4.35-11.96	8,107	6.63
Options canceled/shares repurchased	211	(211)	1.16-6.74	(1,022)	4.84
Options exercised	—	(172)	0.35-8.50	(717)	4.17
Balances, December 31, 2003	494	4,054	$ 0.23-$11.96	$ 21,408	$ 5.28

The options outstanding and currently exercisable by weighted average exercise price at December 31, 2003 were as follows:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number (in thousands)	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number (in thousands)	Weighted Average Exercise Price
$ 0.23- 3.32	335	7.5	$ 2.61	174	$ 2.00
$ 3.49- 4.53	2,107	7.7	$ 4.03	1,178	$ 3.72
$ 4.86- 5.78	474	8.1	$ 5.55	186	$ 5.46
$ 5.91- 6.74	438	7.5	$ 6.28	218	$ 6.29
$ 8.50- 9.60	603	8.6	$ 9.18	271	$ 9.06
$ 9.75-11.96	97	9.8	$ 11.52	4	$ 11.60
$ 0.23-11.96	4,054	7.9	$ 5.28	2,032	$ 4.74

Stock-Based Compensation

During the years ended December 31, 2001, 2002 and 2003, the exercise prices of all options granted were equal to fair market value on the dates of grant. During the period from April 1997 through December 31, 2003, the Company recorded $21.1 million of stock-based compensation related to stock options granted to consultants and employees. For options granted to consultants, the

Company determined the fair value of the options using the Black-Scholes option pricing model with the following assumptions: expected lives of five years; weighted average risk-free rate calculated using rates between 4.5% and 6.2%; expected dividend yield of zero percent; volatility of 75% and deemed values of common stock between $0.35 and $14.67 per share. Stock compensation expense is being recognized in accordance with an accelerated amortization method, over the vesting periods of the related options, which are generally five years.

The allocation of stock-based compensation expense by functional area was as follows (in thousands):

	Years Ended December 31,		
	2003	2002	2001
Cost of revenue	$ 81	$ 124	$ 232
Research and development	187	(36)	583
Sales and marketing	274	398	919
General and administrative	876	1,586	2,913
Total stock-based compensation	$ 1,418	$ 2,072	$ 4,647

Warrants

At December 31, 2002, warrants to purchase 9,010 shares of common stock were outstanding, at a weighted average exercise price of $3.54

per share. These warrants were exercised or canceled during 2003, and at December 31, 2003, no warrants remained outstanding.

Employee Stock Purchase Plan

In April 2000, the stockholders approved the 2000 Employee Stock Purchase Plan, under which eligible employees may purchase common stock of the Company through payroll deductions. Purchases are made semi-annually at a price equal to the lower of 85% of the closing price on the applicable offering commencement date or 85% of the closing price at the end of the purchase period. At December 31, 2003, the Company had 15,454 shares of common stock reserved for purchase by employees under this Plan. During 2003, 2002 and 2001, purchases of 310,026, 175,519 and 114,001 shares, respectively, were made under this Plan. There was no activity under this plan in 2000.

On January 1, 2003 and 2004, an additional 250,000 and 290,795 shares, respectively, were reserved for purchase under the 2000 Employee Stock Purchase Plan.

13. Income Taxes

The Company accounts for income taxes using the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using the current tax laws and rates. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

The provision for income taxes was due to current foreign income taxes, which were $1.4 million, $61,000 and $143,000 for the years ended December 31, 2003, 2002 and 2001, respectively.

Based on the available objective evidence, management believes it is more likely than not that the net deferred tax assets will not be fully realizable. Accordingly, the Company has provided a full valuation allowance against its net deferred tax assets at December 31, 2003.

Net deferred tax assets (liabilities) consisted of the following (in thousands):

	December 31,	
	2003	2002
Depreciation and amortization	$ 1,219	$ (270)
Other	4,505	1,786
Research and development and other credits	5,500	3,575
Net operating losses	39,026	29,437
Deferred tax assets	50,250	34,528
Less: Valuation allowance	(50,250)	(34,528)
	$ —	$ —

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

	2003	2002	2001
Tax at federal statutory rate	(34)%	(34)%	(34)%
State tax, net of federal benefit	(6)	(7)	(6)
Research and development credits	(5)	(3)	(2)
Change in valuation allowance	43	44	35
Stock-based compensation	2	2	7
Foreign tax rate difference and other	4	(2)	1
Provision for income taxes	4%	0%	1%

As of December 31, 2003, the Company had net operating loss carryforwards of approximately $111.4 million for federal and $21.0 million for state tax purposes. If not utilized, these carryforwards will expire beginning in 2009 for federal purposes and 2004 for state purposes.

The Company had research credit carryforwards of approximately $3.2 million and $3.2 million for federal and state income tax purposes,

respectively. If not utilized, the federal research credit carryforward will expire in various amounts beginning in 2010. The California research credit can be carried forward indefinitely.

The Internal Revenue Code limits the use of net operating loss and tax credit carryforwards in certain situations where changes occur in the stock ownership of a company. In the event the Company has a change in ownership, utilization of the carryforwards could be restricted.

Deferred taxes are not provided for the earnings of the Company's foreign subsidiaries, as those earnings are considered permanently reinvested in the operations of the foreign subsidiaries and the Company intends to continue to reinvest its undistributed international earnings to expand its international operations. It is not practical to estimate the amount of additional tax that might be payable on the foreign earnings should they become subject to U.S. tax.

14. Net Loss per Share

Basic net loss per share is computed by dividing net loss for the period by the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss for the period by the weighted average number of common and potential common shares outstanding during the period, if their effect is dilutive. Potential common shares include

common stock subject to repurchase, common stock issuable under the Company's 2000 Employee Stock Purchase Plan, and incremental shares of common stock issuable upon the exercise of stock options and warrants.

The following table sets forth the computation of basic and diluted net loss per share for the periods indicated (in thousands, except per share amounts):

	Years Ended December 31,		
	2003	2002	2001
Numerator:			
Net loss	$ (36,747)	$ (29,072)	$ (25,812)
Denominator:			
Weighted average common shares outstanding	28,257	27,173	26,894
Weighted average unvested common shares subject to repurchase	(103)	(208)	(382)
Denominator for basic and diluted calculations	28,154	26,965	26,512
Basic and diluted net loss per share	$ (1.31)	$ (1.08)	$ (0.97)

The following table sets forth the potential shares of common stock that are not included in the diluted net loss per share calculation above because to do so would be anti-dilutive for the periods indicated (in thousands):

	December 31,		
	2003	2002	2001
Common stock subject to repurchase	65	150	293
Stock options outstanding	4,054	3,215	2,301
Common stock issuable under employee stock purchase plan	85	62	27
Common stock warrants outstanding	—	9	9
Shares that could be issued if all convertible senior notes were converted into common stock	3,265	—	—
	7,469	3,436	2,630

15. Investment in Joint Venture

In January 1999, the Company formed Ciphergen Biosystems KK and took a 30% equity interest in this joint venture with Sumitomo Corporation to distribute the Company's products in Japan. On August 31, 2002, the Company acquired an additional 40% ownership in Ciphergen Biosystems KK, bringing its total ownership to 70%. Ciphergen believes acquiring majority control of Ciphergen Biosystems KK will facilitate expansion of the Company's activities in Japan, including the establishment of a Biomarker Discovery Center laboratory and the distribution of BioSepra sorbents. The Company paid $424,000 in cash for the additional shares of Ciphergen Biosystems KK common stock and incurred direct acquisition costs of $22,000. The acquisition was accounted for using the purchase method of accounting. Accordingly, the results of operations of Ciphergen Biosystems KK and the estimated fair value of assets acquired and liabilities assumed were included in the Company's consolidated financial statements beginning September 1, 2002. The Company acquired $1,318,000 of

cash with Ciphergen Biosystems KK and paid $3,960,000 to repay working capital loans Sumitomo had provided to the joint venture.

The total purchase price was allocated to the estimated fair value of assets acquired and liabilities assumed as follows (in thousands):

Tangible net assets acquired:		
Accounts receivable, net, and other current assets	$	1,352
Inventories		376
Property and equipment		1,300
Other tangible assets		326
Accounts payable and accrued liabilities, including working capital loans		(5,469)
Capital lease obligations		(376)
		(2,491)
Excess of purchase price over net assets acquired		1,619
Net cash acquired upon purchase of Ciphergen Biosystems KK common stock	$	872

The amount of the purchase price in excess of the net assets acquired was recorded as goodwill and is evaluated for impairment at least annually and more often if circumstances warrant.

16. Acquired In-Process Technology

In connection with the acquisiton of BioSepra in 2001, the Company recorded a $1.0 million charge to acquired in-process technology. The amount was determined by identifying research projects for which technological feasibility had not been established and no alternative future uses existed. The value of the projects identified to be in progress was determined by estimating the future cash flows of the product and discounting those net cash flows back to their present value at a discount rate consistent with the inherent risk of the particular project. The net cash flows from the identified in-process projects were expected to commence at various times from 2002 to 2004 and included estimates of research and development costs needed to bring the project from its current state of development to a point of commercial feasibility. The cash flows were based on expected future revenues, cost of revenues, selling, general and administrative costs, research and development costs needed to maintain the project throughout its life cycle, and applicable income taxes for the projects. The discount rates used in the present value calculations were derived from the weighted-average cost of capital of BioSepra and adjusted upward to reflect additional risks inherent in the development life cycle of the particular project. Such discount rates ranged between 19% and 25% for all projects. Development of the technologies remains a substantial risk to the Company due to factors including the remaining effort to achieve technological feasibility, rapidly changing customer markets and competitive threats from other companies. Actual expenses incurred to date have not been materially different from those used in the calculations described above.

17. Employee Benefit Plans

The Company maintains the Ciphergen Biosystems, Inc. 401(k) Savings Plan for its U.S. employees. The Plan allows eligible employees to defer up to 90%, subject to the Internal Revenue Service annual contribution limit, of their pretax compensation at the discretion of the employee.

Under the Plan, the Company is not required to make Plan contributions. The Company had not made any contributions to the Plan as of December 31, 2003.

18. Related Parties

At December 31, 2002, the Company had two non-interest bearing notes receivable totaling $230,000 from an officer. The notes were repaid in 2003 on or before their maturity dates. Additionally, the Company has various notes receivable from officers and employees in the aggregate amount of approximately $1.1 million related to the early exercise of stock options. These full recourse notes have five-year terms, bear interest between 5.82% and 6.80% per annum and are collateralized by the underlying stock and other personal assets. All notes receivable related to the early exercise of options become due immediately upon termination of employment. At December 31, 2003, accrued interest on these notes amounted to $272,000.

During the year ended December 31, 2002, the Company recorded revenue of approximately $800,000 on sales to a related party. These sales were transactions related to the sale of equipment and consumables to the Company's Japanese joint venture prior to August 31, 2002, at which point the Company acquired majority control. The Company also purchased $548,000, $894,000 and $372,000 of inventory in 2003, 2002 and 2001, respectively, from a related party, and in 2002 and 2001 made non-cash payments in the form of Ciphergen common stock to this related party under the terms of a joint development agreement. See Note 10.

19. Segment Information and Geographic Data

Ciphergen's revenue is derived from the sales of related products and services on a worldwide basis. Although discrete components that earn revenues and incur expenses exist, significant expenses such as sales and marketing and corporate administration are not incurred by nor allocated to these operating units but rather are employed by the entire enterprise. Additionally, the chief operating decision maker evaluates resource allocation not on a product or geographic basis, but rather on an enterprise-wide basis. Therefore, management has determined that Ciphergen operates in only one reportable segment, which is the protein research tools and collaborative services business.

The following table reflects the results of the Company's sales to external customers by similar products and services for the years ended December 31, 2003, 2002 and 2001 (in thousands).

	2003	2002	2001
ProteinChip Systems and related products	$ 35,872	$ 24,399	$ 14,341
Process chromatography products	14,451	9,991	2,593
Services	8,049	4,910	2,115
	$ 58,372	$ 39,300	$ 19,049

The Company sells its products and services directly to customers in North America, Western Europe, Japan and China, and through distributors in other parts of Asia and in Australia. Revenue for geographic regions reported below is based upon the customers' locations. Long-lived assets, predominantly machinery and equipment, are reported based on the location of the assets. Following is

a summary of the geographic information related to revenue and long-lived assets for the years ended December 31, 2003, 2002 and 2001 (in thousands):

	2003	2002	2001
Revenue			
North America	$ 26,471	$ 21,869	$ 10,435
Europe	21,148	12,587	6,124
Asia	10,753	4,844	2,490
Total	$ 58,372	$ 39,300	$ 19,049
Long-lived assets			
North America	$ 17,548	$ 13,409	$ 12,267
Europe	7,059	5,845	4,670
Asia	1,163	1,612	—
Total	$ 25,770	$ 20,866	$ 16,937

In 2003, sales to customers in France and Japan each exceeded 10% of total revenue. In 2001 and 2002, no country other than the U.S. accounted for 10% or more of revenue.

20. Quarterly Consolidated Financial Data (Unaudited)

The following table presents certain unaudited consolidated quarterly financial information for the eight quarters ended December 31, 2003. In the second quarter of 2003, gross profit was reduced and net loss was increased by the inclusion of a non-recurring $7.3 million expense related to the settlement of litigation. See Note 5. In management's opinion, this information has been prepared on the same basis as the audited consolidated financial statements and includes all adjustments (consisting only of normal recurring adjustments, except for the non-recurring expense resulting from the litigation settlement) necessary to present fairly the unaudited quarterly results of operations set forth herein.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year
	(in thousands, except per share data)				
Total revenue					
2003	$ 12,841	$ 14,264	$ 16,072	$ 15,195	$ 58,372
2002	6,814	8,653	10,241	13,592	39,300
Gross profit					
2003	8,018	2,302	10,323	9,884	30,527
2002	4,312	5,805	6,709	9,716	26,542
Net loss					
2003	(9,196)	(15,605)	(5,237)	(6,709)	(36,747)
2002	(7,163)	(7,297)	(7,907)	(6,705)	(29,072)
Basic and diluted net loss per share					
2003	(0.34)	(0.56)	(0.18)	(0.23)	(1.31)
2002	(0.27)	(0.27)	(0.29)	(0.25)	(1.08)

Quarterly and annual earnings per share are calculated independently, based on the weighted average number of shares outstanding during the periods.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures. The Company's principal executive and financial officers reviewed and evaluated the Company's disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e) as of the end of the period covered by this Form 10-K. Based on that evaluation, the Company's principal executive and financial officers concluded that the Company's disclosure controls and procedures are effective in timely providing them with material information relating to the Company, as required to be disclosed in the reports the Company files under the Exchange Act.

Changes in Internal Controls. There were no changes in the Company's internal control over financial reporting during the quarter ended December 31, 2003 or subsequent to the date the Company completed its evaluation that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information regarding our directors and executive officers is incorporated by reference from "Election of Directors" in our Proxy Statement for our 2004 Annual Meeting of Stockholders.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference from our definitive Proxy Statement referred to in Item 10 above under the heading "Executive Compensation and Other Matters."

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item is incorporated by reference from our definitive Proxy Statement referred to in Item 10 above under the heading "Security Ownership of Certain Beneficial Owners and Management."

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The information required by this Item is incorporated by reference from our definitive Proxy Statement referred to in Item 10 above under the heading "Certain Relationships and Related Transactions."

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item is incorporated by reference from our definitive Proxy Statement referred to in Item 10 above under the heading "Independent Public Accountants."

PART IV

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

(a) The following documents are filed as part of this Form 10-K:

(1) *Financial Statements (included in Part II of this report):*

	Page
Report of Independent Auditors	53
Consolidated Balance Sheets	54
Consolidated Statements of Operations	55
Consolidated Statements of Stockholders' Equity	56
Consolidated Statements of Cash Flows	57
Notes to Consolidated Financial Statements	58
Quarterly Consolidated Financial Data (Unaudited)	78

(2) *Financial Statement Schedules:*

The following financial statement schedule of Ciphergen Biosystems, Inc. for the years ended December 31, 2003, 2002 and 2001 is filed as part of this Annual Report and should be read in conjunction with the Consolidated Financial Statements of Ciphergen Biosystems, Inc.

Schedule II—Valuation and Qualifying Accounts

All other schedules have been omitted since the required information is not present in amounts sufficient to require submission of the schedule or because the information required is included in the financial statements or notes thereto.

(3) *Exhibits:*

Number	Description of Document
3.2*	Amended and Restated Certificate of Incorporation of Registrant
3.4*	Amended and Restated Bylaws of Registrant
3.5***	Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of Ciphergen Biosystems, Inc.
4.1*	Form of Registrant's Common Stock Certificate
4.2***	Preferred Shares Rights Agreement dated March 20, 2002 between Ciphergen Biosystems, Inc. and Continental Stock Transfer & Trust Company
4.3******	Indenture dated August 22, 2003 between Ciphergen Biosystems, Inc. and U.S. Bank National Association
10.1*	Form of Preferred Stock Purchase Agreement
10.2*	Fourth Amended and Restated Investors Rights Agreement dated March 3, 2000
10.3*	1993 Stock Option Plan
10.4*	Form of Stock Option Agreement
10.5*	2000 Stock Plan and related form of Stock Option Agreement
10.6*	2000 Employee Stock Purchase Plan
10.7*	401(k) Plan
10.8*	Form of Warrant
10.9*	Form of Proprietary Information Agreement between the Registrant and certain of its employees
10.12*	Lease Agreement dated January 28, 2000, between the Registrant and John Arrillaga, Trustee of the John Arrillaga Survivor's Trust and Richard T. Peery, Trustee of the Richard T. Peery Separate Property Trust, and Amendment No. 1 dated August 8, 2000

10.13*	Employment Agreement dated August 24, 2000, between William E. Rich and the Registrant
10.14*	Sublease Agreement between the Registrant and BigBand Networks, Inc. dated August 25, 2000
10.15****	First Amendment dated September 30, 2001 to the Sublease Agreement between the Registrant and BigBand Networks, Inc. dated August 25, 2000
10.23*	MAS License Agreement with IllumeSys Pacific, Inc. dated April 7, 1997
10.24*	MAS License agreement with Ciphergen Technologies, Inc. (formerly ISP Acquisition Corporation) dated April 7, 1997
10.25*	Joint Venture Agreement between Registrant and Sumitomo Corporation
10.26*	Distribution and Marketing Agreement between Registrant and Ciphergen Biosystems KK dated March 24, 1999
10.27*	Joint Development Agreement between Registrant and Stanford Research Systems, Inc. dated February 2, 1995 and amendment thereto
10.28**	Asset Purchase Agreement dated June 25, 2001 by and between Invitrogen Corporation and Ciphergen Biosystems, Inc.
10.29****	OEM Agreement between Salford Systems and Ciphergen Biosystems, Inc. dated February 27, 2001
10.30****	Supply Agreement between Beckman Coulter, Inc. and Ciphergen Biosystems, Inc. dated November 2, 2001
10.31****	Lease Agreement by Natiocredimurs and Cicamur for BioSepra S.A. dated the 29th of April 1998
10.32*****	Stock Purchase Agreement between Registrant and SC Biosciences Corporation dated August 30, 2002
10.33*****	First Amendment to the Joint Venture Agreement between Registrant, Sumitomo Corporation, SC Biosciences Corporation (a subsidiary of Sumitomo Corporation) and Ciphergen Biosystems KK dated March 15, 2002
10.34*****	Second Amendment to Joint Venture Agreement between Registrant, Sumitomo Corporation, SC Biosciences Corporation (a subsidiary of Sumitomo Corporation) and Ciphergen Biosystems KK dated November 15, 2002
10.35*****	Third Amendment to Joint Venture Agreement between Registrant, Sumitomo Corporation, SC Biosciences Corporation (a subsidiary of Sumitomo Corporation) and Ciphergen Biosystems KK dated November 15, 2002
10.36*****	Exhibit A, which amends the Supply Agreement between Beckman Coulter, Inc. and Registrant dated November 2, 2001
10.37*****	Lease Agreement between Symbion and Ciphergen Biosystems A/S dated February 24, 2003
10.38*****	Service and Support Agreement between Registrant and Applied Biosystems/MDS Sciex dated April 2, 2001
10.39*******	Employment Agreement between Gail Page and Registrant dated January 8, 2004
10.40	Employment Agreement between Martin Verhoef and Registrant dated January 8, 2004
10.41******	Registration Rights Agreement dated August 22, 2003
10.42*******	Amendment One to Distributor License Agreement between the Registrant and Salford Systems, Inc. dated August 8, 2003
10.43	Extension of Term of Service and Support Agreement between Registrant and Applied Biosystems/MDS Sciex dated March 10, 2004
21.1*	Subsidiaries of Registrant
23.1	Consent of PricewaterhouseCoopers LLP, Independent Accountants
24.1	Power of Attorney (see page 84)
27.1*	Financial Data Schedule

31.1	Certification of the Chief Executive Officer Pursuant to Section 302 (a) of the Sarbanes-Oxley Act of 2002
31.2	Certification of the Chief Financial Officer Pursuant to Section 302 (a) of the Sarbanes-Oxley Act of 2002
32	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Incorporated by reference from our registration statement on Form S-1, registration number 333-32812, declared effective by the Securities and Exchange Commission on September 28, 2000

** Incorporated by reference to our Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission for the period ended June 30, 2001, file number 000-31617

*** Incorporated by reference to our Registration Statement on Form 8-A, filed with the Securities and Exchange Commission on March 21, 2002

**** Incorporated by reference to our Annual Report on Form 10-K filed with the Securities and Exchange Commission for the period ended December 31, 2001, file number 000-31617

***** Incorporated by reference to our Annual Report on Form 10-K filed with the Securities and Exchange Commission for the period ended December 31, 2002, file number 000-31617

****** Incorporated by reference to our Registration Statement on Form S-3 filed with the Securities Exchange Commission on October 8, 2003

******* Certain portions of this exhibit have been omitted and filed separately with the Securities and Exchange Commission. Confidential treatment has been requested with respect to such omitted portions.

(b) Reports on Form 8-K

On October 30, 2003, the Company filed a report on Form 8-K regarding its October 30, 2003 press release announcing its results for the quarter ended September 30, 2003.

(c) Exhibits

The exhibits listed under Item 15(a)(3) above are filed as part of this Form 10-K.

(d) Financial Statement Schedules

The financial statement schedules under Item 15(a)(2) above are filed as part of this Form 10-K.

SIGNATURES

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

CIPHERGEN BIOSYSTEMS, INC.

By: /s/ WILLIAM E. RICH, PH.D.

William E. Rich, Ph.D.
President and Chief Executive Officer

Dated: March 15, 2004

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints William E. Rich and Matthew J. Hogan, and each of them, his true and lawful attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any amendments to this report on Form 10-K and to file the same, with exhibits thereto and other documents in connection

therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ WILLIAM E. RICH, PH.D. William E. Rich, Ph.D.	President and Chief Executive Officer, and Director (Principal Executive Officer)	March 15, 2004
/s/ MATTHEW J. HOGAN Matthew J. Hogan	Chief Financial Officer (Principal Financial Officer)	March 15, 2004
/s/ DANIEL M. CASERZA Daniel M. Caserza	Corporate Controller (Principal Accounting Officer)	March 15, 2004
/s/ JOHN A. YOUNG John A. Young	Director	March 15, 2004
/s/ JUDY BRUNER Judy Bruner	Director	March 15, 2004

/s/ MICHAEL J. CALLAGHAN Michael J. Callaghan	Director	March 15, 2004
/s/ RAJEN K. DALAL, PH.D. Rajen K. Dalal, Ph.D.	Director	March 15, 2004
/s/ JAMES L. RATHMANN James L. Rathmann	Director	March 15, 2004
/s/ WENDELL WIERENGA, PH.D. Wendell Wierenga, Ph.D.	Director	March 15, 2004

REPORT OF INDEPENDENT AUDITORS ON FINANCIAL STATEMENT SCHEDULE

To the Board of Directors:

Our audits of the consolidated financial statements referred to in our report dated March 9, 2004, appearing in this Form 10-K also included an audit of the consolidated financial statement schedule listed in Item 15(a)2 of this Form 10-K. In our opinion, this consolidated financial statement schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California
March 9, 2004

SCHEDULE II

CIPHERGEN BIOSYSTEMS, INC.

VALUATION AND QUALIFYING ACCOUNTS

Years Ended December 31, 2003, 2002 and 2001
(in thousands)

	Balance at Beginning of Year	Additions Charged to Earnings	Deductions	Other Changes	Balance at End of Year
Allowance for doubtful accounts:					
31 Dec 2003	$ 344	$ 211	$ 28	$ 26	$ 55
31 Dec 2002	324	313	306	13	34
31 Dec 2001	160	180	51	35	32
Inventory reserve:					
31 Dec 2003	735	691	216	128	1,33
31 Dec 2002	865	254	472	88	73
31 Dec 2001	107	248	22	532	86
Deferred tax valuation allowance:					
31 Dec 2003	34,528	15,722	—	—	50,25
31 Dec 2002	22,212	12,316	—	—	34,52
31 Dec 2001	13,312	8,900	—	—	22,21

QuickLinks

CIPHERGEN BIOSYSTEMS, INC. FORM 10-K INDEX
PART I

ITEM 1. BUSINESS

ITEM 2. PROPERTIES
ITEM 3. LEGAL PROCEEDINGS
ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES
ITEM 6. SELECTED FINANCIAL DATA

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

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISKS

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS
REPORT OF INDEPENDENT AUDITORS
CIPHERGEN BIOSYSTEMS, INC. CONSOLIDATED BALANCE SHEETS (in thousands, except share and per share data)
CIPHERGEN BIOSYSTEMS, INC. CONSOLIDATED STATEMENTS OF OPERATIONS (in thousands, except per share data)
CIPHERGEN BIOSYSTEMS, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (in thousands)
CIPHERGEN BIOSYSTEMS, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)
CIPHERGEN BIOSYSTEMS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE
ITEM 9A. CONTROLS AND PROCEDURES

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT
ITEM 11. EXECUTIVE COMPENSATION
ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS
ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS
ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

PART IV

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

SIGNATURES
POWER OF ATTORNEY
REPORT OF INDEPENDENT AUDITORS ON FINANCIAL STATEMENT SCHEDULE
SCHEDULE II CIPHERGEN BIOSYSTEMS, INC. VALUATION AND QUALIFYING ACCOUNTS Years Ended December 31, 2003, 2002 and 2001 (in thousands)

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

Exhibit 10.39

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement") between Ciphergen Biosystems, Inc., a Delaware corporation (the "Company") and Gail Page ("Executive," and together with the Company, the "Parties") who lives at 15901 Soleil Court, Austin, Texas, is effective as of January 8, 2004 (the "Effective Date").

WHEREAS, the Company desires to employ Executive as Executive Vice President of the Company and President of the Protein Molecular Diagnostics Division and Executive is willing to accept such employment by the Company on the terms and subject to the conditions set forth in this Agreement.

NOW, THEREFORE, the Parties agree as follows:

1. Position . The Company will employ Executive as Executive Vice President of Ciphergen Biosystems, Inc. and President of the Protein Molecular Diagnostics Division. In this position, Executive will be expected to devote Executive's full business time, attention and energies to the performance of Executive's duties with the Company. Executive may devote time to outside Board or advisory positions as pre-approved by the Chief Executive Officer of Ciphergen Biosystems, Inc. Executive will render such business and professional services in the performance of such duties, consistent with Executive's position within the Company, as shall be reasonably assigned to Executive by the Company's CEO or Board of Directors.

2. Compensation . The Company will pay Executive a base salary of $240,000 on an annualized basis, payable in accordance with the Company's standard payroll policies, including compliance with applicable tax withholding requirements. In addition, Executive will be eligible for a bonus of up to 35% of Executive's base salary for achievement of reasonable performance-related goals to be defined by the Company's CEO or Board of Directors. The exact payment terms of a bonus, if any, are to be set by the Compensation Committee of the Board of Directors, in its sole discretion.

3. Benefits . During the term of Executive's employment, Executive will be entitled to the Company's standard benefits covering employees at Executive's level, including the Company's group medical, dental, vision and term life insurance plans, section 125 plan, employee stock purchase plan and 401(k) plan, as such plans may be in effect from time to time, subject to the Company's right to cancel or change the benefit plans and programs it offers to its employees at any time.

4. At-Will Employment . Executive's employment with the Company is for an unspecified duration and constitutes "at-will" employment. This employment relationship may be terminated at any time, with or without good cause or for any or no cause, at the option either of the Company or Executive, with or without notice.

5. Termination without Cause or for Good Reason . In the event the Company terminates Executive's employment for reasons other than for Cause (as defined below) or Executive terminates her employment for Good Reason (as defined below), and provided that Executive signs and does not revoke a standard release of all claims against the Company, and does not breach any provision of this Agreement (including but not limited to Section 10 and Section 11 hereof) or the PIIA, as hereinafter defined, Executive shall be entitled to receive:

(i) continued payment of Executive's base salary as then in effect for a period of twelve (12) months following the date of termination (the "Severance Period"), to be paid periodically in accordance with the Company's standard payroll practices;

(ii) continuation of Company health and dental benefits through COBRA premiums paid by the Company directly to the COBRA administrator during the Severance Period; provided, however, that such premium payments shall cease prior to the end of the Severance Period if Executive commences other employment with reasonably comparable or greater health and dental benefits.

Executive will not be eligible for any bonus, vesting of stock options or other benefits not described above after termination, except as may be required by law.

6. Termination After Change of Control . If Executive's employment is terminated by the Company for reasons other than for Cause (as defined below) or by Executive for Good Reason (as defined below) within the 12 month period following a Change of Control (as defined below), then, in addition to the severance obligations due to Executive under paragraph 5 above, 100% of any then-unvested shares under Company stock options then held by Executive will vest upon the date of such termination.

7. Definitions . For purposes of this Agreement:

a. "Cause" means termination of employment by reason of Executive's: (i) material breach of this Agreement, the PIIA (as hereinafter defined) or any other confidentiality, invention assignment or similar agreement with the Company; (ii) repeated negligence in the performance of duties or nonperformance or misperformance of such duties that in the good faith judgment of the Board of Directors of the Company adversely affects the operations or reputation of the Company; (iii) refusal to abide by or comply with the good faith directives of the Company's CEO or Board of Directors or the Company's standard policies and procedures, which actions continue for a period of at least ten (10) days after written notice from the Company; (iv) violation or breach of the Company's Code of Ethics, Financial Information Integrity Policy, Insider Trading Compliance Program, or any other similar code or policy adopted by the Company and generally applicable to the Company's employees, as then in effect; (v) willful dishonesty, fraud, or misappropriation of funds or property with respect to the business or affairs of the Company; (vi) conviction by, or entry of a plea of guilty or nolo contendere in, a court of competent and final jurisdiction for any crime which constitutes a felony in the jurisdiction involved; or (vii) abuse of alcohol or drugs (legal or illegal)

that, in the Board of Director's reasonable judgment, materially impairs Executive's ability to perform Executive's duties.

b. "Change of Control" means (i) after the date hereof, any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities; or (ii) the date of the consummation of a merger or consolidation of the Company with any other corporation or entity that has been approved by the stockholders of the Company, other than a merger or consolidation that would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent more than fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or (iii) the date of the consummation of the sale or disposition of all or substantially all of the Company's assets.

c. "Good Reason" means, without Executive's consent, (i) a material and adverse change in Executive's duties (excluding any changes in such duties resulting from the Company becoming part of a larger entity pursuant to a Change of Control) or base salary, or (ii) Executive being required to relocate to an office location more than 50 miles from Executive's current office in Austin, Texas. Should Executive be required and agree to relocate from current office in Austin, Texas, all reasonable moving expenses to relocate Executive's office and private residence shall be paid for and billed directly to Company.

8. Employment, Confidential Information and Invention Assignment Agreement . As a condition of Executive's employment, Executive shall complete, sign and return the Company's standard form of Proprietary Information and Inventions Agreement (the "PIIA").

9. Non-Contravention . Executive represents to the Company that Executive's signing of this Agreement, the PIIA, the issuance of stock options to Executive, and Executive's commencement of employment with the Company does not violate any agreement Executive has with Executive's previous employer and Executive's signature confirms this representation.

10. Conflicting Employment . Executive agrees that, during the term of Executive's employment with the Company and during the Severance Period, Executive will not engage in any other employment, occupation, consulting or other business activity competitive with or directly related to the business in which the Company is now involved or becomes involved during the term of Executive's employment, nor will Executive engage in any other activities that conflict with Executive's obligations to the Company. Executive acknowledges that compliance with the obligations of this paragraph is a condition to Executive's right to receive the severance payments set forth in paragraph 5 above . Company expressly grants Executive the right and finds no violation of this provision for Executive to serve in a Board or Advisory position with [*] or [*] or other similarly situations as pre-approved by the Chief Executive Officer of Company.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

11. Nonsolicitation . From the date of this Agreement until 12 months after the termination of this Agreement (the "Restricted Period"), Executive will not, directly or indirectly, solicit or encourage any employee or contractor of the Company or its affiliates to terminate employment with, or cease providing services to, the Company or its affiliates. During the Restricted Period, Executive will not, whether for Executive's own account or for the account of any other person, firm, corporation or other business organization, solicit or interfere with any person who is or during the period of Executive's engagement by the Company was a collaborator, partner, licensor, licensee, vendor, supplier, customer or client of the Company or its affiliates to the Company's detriment. Executive acknowledges that compliance with the obligations of this paragraph is a condition to Executive's right to receive the severance payments set forth in paragraph 5 above.

12. Arbitration and Equitable Relief .

a. In consideration of Executive's employment with the Company, its promise to arbitrate all employment-related disputes and Executive's receipt of the compensation and other benefits paid to Executive by the Company, at present and in the future, EXECUTIVE AGREES THAT ANY AND ALL CONTROVERSIES, CLAIMS, OR DISPUTES WITH ANYONE (INCLUDING THE COMPANY AND ANY EMPLOYEE, OFFICER, DIRECTOR, STOCKHOLDER OR BENEFIT PLAN OF THE COMPANY IN THEIR CAPACITY AS SUCH OR OTHERWISE) ARISING OUT OF, RELATING TO, OR RESULTING FROM EXECUTIVE'S EMPLOYMENT WITH THE COMPANY OR THE TERMINATION OF EXECUTIVE'S EMPLOYMENT WITH THE COMPANY, INCLUDING ANY BREACH OF THIS AGREEMENT, SHALL BE SUBJECT TO BINDING ARBITRATION UNDER THE ARBITRATION RULES SET FORTH IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 1280 THROUGH 1294.2, INCLUDING SECTION 1283.05 (THE "RULES") AND PURSUANT TO CALIFORNIA LAW. Disputes which Executive agrees to arbitrate, and thereby agree to waive any right to a trial by jury, include any statutory claims under state or federal law, including, but not limited to, claims under Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990, the Age Discrimination in Employment Act of 1967, the Older Workers Benefit Protection Act, the California Fair Employment and Housing Act, the California Labor Code, claims of harassment, discrimination or wrongful termination and any statutory claims. Executive further understands that this agreement to arbitrate also applies to any disputes that the Company may have with Executive.

b. Executive agrees that any arbitration will be administered by the American Arbitration Association ("AAA") and that the neutral arbitrator will be selected in a manner consistent with its National Rules for the Resolution of Employment Disputes. Executive agrees that the arbitrator shall have the power to decide any motions brought by any party to the arbitration, including motions for summary judgment and/or adjudication and motions to dismiss and demurrers, prior to any arbitration hearing. Executive also agrees that the arbitrator shall have the power to award any remedies, including attorneys' fees and costs, available under applicable law. Executive understands the Company will pay for any administrative or hearing fees charged by the arbitrator or

AAA except that Executive shall pay the first $125.00 of any filing fees associated with any arbitration Executive initiates. Executive agrees that the arbitrator shall administer and conduct any arbitration in a manner consistent with the Rules and that to the extent that the AAA's National Rules for the Resolution of Employment Disputes conflict with the Rules, the Rules shall take precedence. Executive agrees that the decision of the arbitrator shall be in writing.

c. Except as provided by the Rules and this Agreement, arbitration shall be the sole, exclusive and final remedy for any dispute between Executive and the Company. Accordingly, except as provided for by the Rules and this Agreement, neither Executive nor the Company will be permitted to pursue court action regarding claims that are subject to arbitration. Notwithstanding, the arbitrator will not have the authority to disregard or refuse to enforce any lawful company policy, and the arbitrator shall not order or require the Company to adopt a policy not otherwise required by law which the Company has not adopted.

d. In addition to the right under the Rules to petition the court for provisional relief, Executive agrees that any party may also petition the court for injunctive relief where either party alleges or claims a violation of the PIIA between Executive and the Company or any other agreement regarding trade secrets, confidential information, nonsolicitation or Labor Code §2870. Executive understands that any breach or threatened breach of such an agreement will cause irreparable injury and that money damages will not provide an adequate remedy therefor and both parties hereby consent to the issuance of an injunction. In the event either party seeks injunctive relief, the prevailing party shall be entitled to recover reasonable costs and attorneys fees.

e. Executive understands that this Agreement does not prohibit Executive from pursuing an administrative claim with a local, state or federal administrative body such as the Department of Fair Employment and Housing, the Equal Employment Opportunity Commission or the Workers' Compensation Board. This Agreement does, however, preclude Executive from pursuing court action regarding any such claim.

f. Executive acknowledges and agrees that Executive is executing this Agreement voluntarily and without any duress or undue influence by the Company or anyone else. Executive further acknowledges and agrees that Executive has carefully read this Agreement and that Executive has asked any questions needed for Executive to understand the terms, consequences and binding effect of this Agreement and fully understand it, including that Executive is waiving Executive's right to a jury trial. Finally, Executive agrees that Executive has been provided an opportunity to seek the advice of an attorney of Executive's choice before signing this Agreement.

13. Successors of the Company . The rights and obligations of the Company under this Agreement shall inure to the benefit of, and shall be binding upon, the successors and assigns of the Company. This Agreement shall be assignable by the Company in the event of a merger or similar transaction in which the Company is not the surviving entity, or of a sale of all or substantially all of the Company's assets.

14. Enforceability; Severability . If any provision of this Agreement shall be invalid or unenforceable, in whole or in part, such provision shall be deemed to be modified or restricted to the extent and in the manner necessary to render the same valid and enforceable, or shall be deemed excised from this Agreement, as the case may require, and this Agreement shall be construed and enforced to the maximum extent permitted by law as if such provision had been originally incorporated herein as so modified or restricted, or as if such provision had not been originally incorporated herein, as the case may be.

15. Governing Law . This Agreement shall be construed and enforced in accordance with the laws of the State of Texas without giving effect to Texas's choice of law rules. This Agreement is deemed to be entered into entirely in the State of Texas. This Agreement shall not be strictly construed for or against either party.

16. No Waiver . No waiver of any term of this Agreement constitutes a waiver of any other term of this Agreement.

17. Amendment To This Agreement . This Agreement may be amended only in writing by an agreement specifically referencing this Agreement, which is signed by both Executive and an executive officer or member of the Board of Directors of the Company authorized to do so by the Board by resolution.

18. Headings . Section headings in this Agreement are for convenience only and shall be given no effect in the construction or interpretation of this Agreement.

19. Notice . All notices made pursuant to this Agreement, shall be given in writing, delivered by a generally recognized overnight express delivery service, and shall be made to the following addresses, or such other addresses as the Parties may later designate in writing:

If to the Company:

Ciphergen Biosystems, Inc.
6611 Dumbarton Circle
Fremont, California 94555
Attention: Chief Financial Officer

If to Executive:

Gail Page
15901 Soleil Court
Austin, Texas 78734

20. Expense Reimbursement . The Company shall promptly reimburse Executive reasonable business expenses incurred by Executive in furtherance of or in connection with the

performance of Executive's duties hereunder, including expenditures for travel, in accordance with the Company's expense reimbursement policy as in effect from time to time.

21. General; Conflict . This Agreement and the PIIA, when signed by Executive, set forth the terms of Executive's employment with the Company and supersede any and all prior representations and agreements, whether written or oral. Executive and the Company agree that in the event of any conflict between the provisions of this Agreement with the PIIA or with the Offer Letter to Executive dated January 8, 2004, the provisions of this Agreement shall control.

Ciphergen Biosystems, Inc.
a Delaware corporation

By: _____

Name: _____

Title: _____

ACCEPTED AND AGREED TO this
8th day of January, 2004.

_____
Gail Page

Exhibit 10.40

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement") between Ciphergen Biosystems, Inc., a Delaware corporation (the "Company") and Martin Verhoef ("Executive," and together with the Company, the "Parties") who lives at 736 Midland Way, Redwood City, CA, is effective as of January 8, 2004 (the "Effective Date").

WHEREAS, Executive is currently employed as the Company's Senior Vice President, Sales, Marketing and Operations.

WHEREAS, the Company desires to promote Executive to Executive Vice President of the Company and President of the Biosystems Division and Executive is willing to accept such employment promotion by the Company on the terms and subject to the conditions set forth in this Agreement.

NOW, THEREFORE, the Parties agree as follows:

1. Position . The Company will employ Executive as Executive Vice President of Ciphergen Biosystems, Inc. and President of the Biosystems Division. In this position, Executive will be expected to devote Executive's full business time, attention and energies to the performance of Executive's duties with the Company. Executive may devote time to outside Board or advisory positions as pre-approved by the Chief Executive Officer of Ciphergen Biosystems, Inc. Executive will render such business and professional services in the performance of such duties, consistent with Executive's position within the Company, as shall be reasonably assigned to Executive by the Company's CEO or Board of Directors.

2. Compensation . The Company will pay Executive a base salary of $250,000 on an annualized basis, payable in accordance with the Company's standard payroll policies, including compliance with applicable tax withholding requirements. In addition, Executive will be eligible for a bonus of up to 35% of Executive's base salary for achievement of reasonable performance-related goals to be defined by the Company's CEO or Board of Directors. The exact payment terms of a bonus, if any, are to be set by the Compensation Committee of the Board of Directors, in its sole discretion.

3. Benefits . During the term of Executive's employment, Executive will be entitled to the Company's standard benefits covering employees at Executive's level, including the Company's group medical, dental, vision and term life insurance plans, section 125 plan, employee stock purchase plan and 401(k) plan, as such plans may be in effect from time to time, subject to the Company's right to cancel or change the benefit plans and programs it offers to its employees at any time.

4. At-Will Employment . Executive's employment with the Company is for an unspecified duration and constitutes "at-will" employment. This employment relationship may be

terminated at any time, with or without good cause or for any or no cause, at the option either of the Company or Executive, with or without notice.

5. Termination without Cause or for Good Reason . In the event the Company terminates Executive's employment for reasons other than for Cause (as defined below) or Executive terminates his employment for Good Reason (as defined below), and provided that Executive signs and does not revoke a standard release of all claims against the Company, and does not breach any provision of this Agreement (including but not limited to Section 10 and Section 11 hereof) or the PIIA, as hereinafter defined, Executive shall be entitled to receive:

(i) continued payment of Executive's base salary as then in effect for a period of twelve (12) months following the date of termination (the "Severance Period"), to be paid periodically in accordance with the Company's standard payroll practices; and

(ii) continuation of Company health and dental benefits through COBRA premiums paid by the Company directly to the COBRA administrator during the Severance Period; provided, however, that such premium payments shall cease prior to the end of the Severance Period if Executive commences other employment with reasonably comparable or greater health and dental benefits.

Executive will not be eligible for any bonus, vesting of stock options or other benefits not described above after termination, except as may be required by law.

6. Termination After Change of Control . If Executive's employment is terminated by the Company for reasons other than for Cause (as defined below) or by Executive for Good Reason (as defined below) within the 12 month period following a Change of Control (as defined below), then, in addition to the severance obligations due to Executive under paragraph 5 above, 100% of any then-unvested shares under Company stock options then held by Executive will vest upon the date of such termination.

7. Definitions . For purposes of this Agreement:

a. "Cause" means termination of employment by reason of Executive's: (i) material breach of this Agreement, the PIIA (as hereinafter defined) or any other confidentiality, invention assignment or similar agreement with the Company; (ii) repeated negligence in the performance of duties or nonperformance or misperformance of such duties that in the good faith judgment of the Board of Directors of the Company adversely affects the operations or reputation of the Company; (iii) refusal to abide by or comply with the good faith directives of the Company's CEO or Board of Directors or the Company's standard policies and procedures, which actions continue for a period of at least ten (10) days after written notice from the Company; (iv) violation or breach of the Company's Code of Ethics, Financial Information Integrity Policy, Insider Trading Compliance Program, or any other similar code or policy adopted by the Company and generally applicable to the Company's employees, as then in effect; (v) willful dishonesty, fraud, or misappropriation of funds or property with respect to the business or affairs of the Company; (vi) conviction by, or entry of a

plea of guilty or nolo contendere in, a court of competent and final jurisdiction for any crime which constitutes a felony in the jurisdiction involved; or (vii) abuse of alcohol or drugs (legal or illegal) that, in the Board of Director's reasonable judgment, materially impairs Executive's ability to perform Executive's duties.

b. "Change of Control" means (i) after the date hereof, any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) becomes the "beneficial owner" (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the total voting power represented by the Company's then outstanding voting securities; or (ii) the date of the consummation of a merger or consolidation of the Company with any other corporation or entity that has been approved by the stockholders of the Company, other than a merger or consolidation that would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent more than fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or (iii) the date of the consummation of the sale or disposition of all or substantially all of the Company's assets.

c. "Good Reason" means, without Executive's consent, (i) a material and adverse change in Executive's duties (excluding any changes in such duties resulting from the Company becoming part of a larger entity pursuant to a Change of Control) or base salary, or (ii) Executive being required to relocate to an office location more than 50 miles from Ciphergen's current headquarters in Fremont, CA.

8. Employment, Confidential Information and Invention Assignment Agreement . As a condition of Executive's employment, Executive shall complete, sign and return the Company's standard form of Proprietary Information and Inventions Agreement (the "PIIA").

9. Non-Contravention . Executive represents to the Company that Executive's signing of this Agreement, the PIIA, the issuance of stock options to Executive, and Executive's commencement of employment with the Company does not violate any agreement Executive has with Executive's previous employer and Executive's signature confirms this representation.

10. Conflicting Employment . Executive agrees that, except as pre-approved by the Company's Chief Executive Officer pursuant to paragraph 1 above, during the term of Executive's employment with the Company, Executive will not engage in any other employment, occupation, consulting or other business activity competitive with or directly related to the business in which the Company is now involved or becomes involved during the term of Executive's employment, nor will Executive engage in any other activities that conflict with Executive's obligations to the Company.

11. Nonsolicitation . From the date of this Agreement until 12 months after the termination of this Agreement (the "Restricted Period"), Executive will not, directly or indirectly, solicit or encourage any employee or contractor of the Company or its affiliates to terminate employment with, or cease providing services to, the Company or its affiliates. During the

Restricted Period, Executive will not, whether for Executive's own account or for the account of any other person, firm, corporation or other business organization, solicit or interfere with any person who is or during the period of Executive's engagement by the Company was a collaborator, partner, licensor, licensee, vendor, supplier, customer or client of the Company or its affiliates to the Company's detriment. Executive acknowledges that compliance with the obligations of this paragraph is a condition to Executive's right to receive the severance payments set forth in paragraph 5 above.

12. Arbitration and Equitable Relief .

a. In consideration of Executive's employment with the Company, its promise to arbitrate all employment-related disputes and Executive's receipt of the compensation and other benefits paid to Executive by the Company, at present and in the future, EXECUTIVE AGREES THAT ANY AND ALL CONTROVERSIES, CLAIMS, OR DISPUTES WITH ANYONE (INCLUDING THE COMPANY AND ANY EMPLOYEE, OFFICER, DIRECTOR, STOCKHOLDER OR BENEFIT PLAN OF THE COMPANY IN THEIR CAPACITY AS SUCH OR OTHERWISE) ARISING OUT OF, RELATING TO, OR RESULTING FROM EXECUTIVE'S EMPLOYMENT WITH THE COMPANY OR THE TERMINATION OF EXECUTIVE'S EMPLOYMENT WITH THE COMPANY, INCLUDING ANY BREACH OF THIS AGREEMENT, SHALL BE SUBJECT TO BINDING ARBITRATION UNDER THE ARBITRATION RULES SET FORTH IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 1280 THROUGH 1294.2, INCLUDING SECTION 1283.05 (THE "RULES") AND PURSUANT TO CALIFORNIA LAW. Disputes which Executive agrees to arbitrate, and thereby agree to waive any right to a trial by jury, include any statutory claims under state or federal law, including, but not limited to, claims under Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990, the Age Discrimination in Employment Act of 1967, the Older Workers Benefit Protection Act, the California Fair Employment and Housing Act, the California Labor Code, claims of harassment, discrimination or wrongful termination and any statutory claims. Executive further understands that this agreement to arbitrate also applies to any disputes that the Company may have with Executive.

b. Executive agrees that any arbitration will be administered by the American Arbitration Association ("AAA") and that the neutral arbitrator will be selected in a manner consistent with its National Rules for the Resolution of Employment Disputes. Executive agrees that the arbitrator shall have the power to decide any motions brought by any party to the arbitration, including motions for summary judgment and/or adjudication and motions to dismiss and demurrers, prior to any arbitration hearing. Executive also agrees that the arbitrator shall have the power to award any remedies, including attorneys' fees and costs, available under applicable law. Executive understands the Company will pay for any administrative or hearing fees charged by the arbitrator or AAA except that Executive shall pay the first $125.00 of any filing fees associated with any arbitration Executive initiates. Executive agrees that the arbitrator shall administer and conduct any arbitration in a manner consistent with the Rules and that to the extent that the AAA's National

Rules for the Resolution of Employment Disputes conflict with the Rules, the Rules shall take precedence. Executive agrees that the decision of the arbitrator shall be in writing.

c. Except as provided by the Rules and this Agreement, arbitration shall be the sole, exclusive and final remedy for any dispute between Executive and the Company. Accordingly, except as provided for by the Rules and this Agreement, neither Executive nor the Company will be permitted to pursue court action regarding claims that are subject to arbitration. Notwithstanding, the arbitrator will not have the authority to disregard or refuse to enforce any lawful company policy, and the arbitrator shall not order or require the Company to adopt a policy not otherwise required by law which the Company has not adopted.

d. In addition to the right under the Rules to petition the court for provisional relief, Executive agrees that any party may also petition the court for injunctive relief where either party alleges or claims a violation of the PIIA between Executive and the Company or any other agreement regarding trade secrets, confidential information, nonsolicitation or Labor Code §2870. Executive understands that any breach or threatened breach of such an agreement will cause irreparable injury and that money damages will not provide an adequate remedy therefor and both parties hereby consent to the issuance of an injunction. In the event either party seeks injunctive relief, the prevailing party shall be entitled to recover reasonable costs and attorneys fees.

e. Executive understands that this Agreement does not prohibit Executive from pursuing an administrative claim with a local, state or federal administrative body such as the Department of Fair Employment and Housing, the Equal Employment Opportunity Commission or the Workers' Compensation Board. This Agreement does, however, preclude Executive from pursuing court action regarding any such claim.

f. Executive acknowledges and agrees that Executive is executing this Agreement voluntarily and without any duress or undue influence by the Company or anyone else. Executive further acknowledges and agrees that Executive has carefully read this Agreement and that Executive has asked any questions needed for Executive to understand the terms, consequences and binding effect of this Agreement and fully understand it, including that Executive is waiving Executive's right to a jury trial. Finally, Executive agrees that Executive has been provided an opportunity to seek the advice of an attorney of Executive's choice before signing this Agreement.

13. Successors of the Company . The rights and obligations of the Company under this Agreement shall inure to the benefit of, and shall be binding upon, the successors and assigns of the Company. This Agreement shall be assignable by the Company in the event of a merger or similar transaction in which the Company is not the surviving entity, or of a sale of all or substantially all of the Company's assets.

14. Enforceability; Severability . If any provision of this Agreement shall be invalid or unenforceable, in whole or in part, such provision shall be deemed to be modified or restricted to the extent and in the manner necessary to render the same valid and enforceable, or shall be deemed excised from this Agreement, as the case may require, and this Agreement shall be construed and

enforced to the maximum extent permitted by law as if such provision had been originally incorporated herein as so modified or restricted, or as if such provision had not been originally incorporated herein, as the case may be.

15. Governing Law . This Agreement shall be construed and enforced in accordance with the laws of the State of California without giving effect to California's choice of law rules. This Agreement is deemed to be entered into entirely in the State of California. This Agreement shall not be strictly construed for or against either party.

16. No Waiver . No waiver of any term of this Agreement constitutes a waiver of any other term of this Agreement.

17. Amendment To This Agreement . This Agreement may be amended only in writing by an agreement specifically referencing this Agreement, which is signed by both Executive and an executive officer or member of the Board of Directors of the Company authorized to do so by the Board by resolution.

18. Headings . Section headings in this Agreement are for convenience only and shall be given no effect in the construction or interpretation of this Agreement.

19. Notice . All notices made pursuant to this Agreement, shall be given in writing, delivered by a generally recognized overnight express delivery service, and shall be made to the following addresses, or such other addresses as the Parties may later designate in writing:

If to the Company:

Ciphergen Biosystems, Inc.
6611 Dumbarton Circle
Fremont, California 94555
Attention: Chief Financial Officer

If to Executive:

Martin Verhoef
736 Midland Way
Redwood City, CA 94062

20. Expense Reimbursement . The Company shall promptly reimburse Executive reasonable business expenses incurred by Executive in furtherance of or in connection with the performance of Executive's duties hereunder, including expenditures for travel, in accordance with the Company's expense reimbursement policy as in effect from time to time.

21. General; Conflict . This Agreement and the PIIA, when signed by Executive, set forth the terms of Executive's employment with the Company and supersede any and all prior

representations and agreements, whether written or oral. Executive and the Company agree that in the event of any conflict between the provisions of this Agreement with the PIIA or with the Offer Letter to Executive dated April 5, 2000, the provisions of this Agreement shall control.

Ciphergen Biosystems, Inc.
a Delaware corporation

By: _____

Name: _____

Title: _____

ACCEPTED AND AGREED TO this
8th day of January, 2004.

_____
Martin Verhoef

Exhibit 10.42

[*] CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS, HAS BEEN OMITTED AND FILED SEPARATELY WITH THE SECURITIES AND EXCHANGE COMMISSION PURSUANT TO RULE 406 OF THE SECURITIES EXCHANGE ACT OF 1933, AS AMENDED.

AMENDMENT ONE
TO
DISTRIBUTOR LICENSE AGREEMENT

This Amendment One (this "Amendment") to the Distributor License Agreement effective August 8, 2003 (the "Agreement") by and between Ciphergen Biosystems, Inc. and Salford Systems, Inc. (together, the "Parties") is effective November)), 2003. The Parties hereby agree as follows:

1. Exhibit A (Software and Pricing Schedule) attached to the Agreement is hereby deleted in its entirety and the attached revised Exhibit A is substituted therefor.

2. Except as expressly modified by this Amendment, the provisions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the Parties have executed caused this Amendment to be executed by their respective authorized representatives.

CIPHERGEN BIOSYSTEMS, INC:

By: /s/ Martin Verhoef
(Signature)

Name: Martin Verhoef

Title: Senior Vice President of Sales, Marketing and Operations

Date: Jan. 7, 2004

SALFORD SYSTEMS, INC.

By: /s/ Dan Steinberg
(Signature)

Name: Dan Steinberg, PhD

Title: President

Date: Dec. 16, 2003

EXHIBIT A
SOFTWARE AND PRICING SCHEDULE

PER UNIT LICENSE FEES:

In accordance with the License Fee Basis, as specified in Section 6.1.1, Ciphergen shall pay Salford a per-unit license fee of [*] for each copy of Biomarker Patterns ™ Software licensed to an End-User.

1. Sales to new End-Users:

1.a. CART Pro 4.x - Standard Unit 64mb, 1-5 user site license. Ciphergen shall pay Salford a per-unit license fee of $[*] for each copy sublicensed to an End-User.

1.b. CART Pro 4.x - Standard Unit 64mb: For End-Users wishing to purchase additional individual licenses, Ciphergen shall pay Salford a per-seat license fee of $[*] for each additional user.

1.c. CART 5.x - Standard Unit 64 mb, 1-5 user site license with limited TreeNet 1.x functionality: Ciphergen shall pay Salford a per-unit license fee of $[*] for each copy sublicensed to an End-User.

1.d. CART 5.x - Standard Unit 64mb: For End-Users wishing to purchase additional individual licenses, Ciphergen shall pay Salford a per-seat license fee of $[*] for each additional user.

2. Sales to existing End-Users of Biomarker Patterns Software 4.x:

2.a. Ciphergen will upgrade existing End-Users of Biomarker Patterns Software 4.x to the Ciphergen-branded CART 5.x/Treenet for a discounted price (proposed [*]% discount off a list price of $[*]). Ciphergen shall pay Salford a per-unit license fee of $[*] for each copy sublicensed to an End-User.

2.b. While the Ciphergen-branded CART 5.x/Treenet product is in development, existing End-Users who purchase Biomarker Patterns Software 4.x will be offered an Upgrade to the Ciphergen-branded CART 5.x/Treenet for a reduced price (proposed list price $[*]), such Upgrades to be presold at the time of purchase of Biomarker Patterns ™ Software 4.x. Ciphergen shall pay Salford a per-unit license fee of $[*] in connection with sublicenses granted to such existing End-Users.

ANNUAL RENEWAL FEE:

The Salford Software shall be subject to annual renewal license fees. In the calendar year 2003, for annual renewal of CART 4.x or CART 5.x/Treenet 1.x, Ciphergen shall pay Salford $[*] per unit for each unit of Salford Software and $[*] for each additional seat, if any. Ciphergen shall order each such renewal license following receipt of the applicable renewal request from an End-User. Salford shall issue an invoice in connection with such orders and Ciphergen shall pay each such invoice within 30 days after receipt of such invoice. Salford acknowledges and agrees that Ciphergen's End-Users will contact Ciphergen directly to purchase annual license renewals. In the event that any End-User fails to renew any such license or to purchase an annual license renewal and subsequently wishes to purchase a renewal of such license, Salford shall not impose any penalties, interest or other fees in connection with any such renewal. Ciphergen shall have no liability, financial or otherwise, hereunder to Salford for any such license with respect to which the applicable End-User fails to renew such license.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

ANNUAL SALES COMMITMENT:

The initial Minimum Annual Purchase Commitment shall be [*] per-unit licenses fees of the Salford Software.

* Certain information on this page has been omitted and filed separately with the Commission. Confidential treatment has been requested with respect to the omitted portions.

Exhibit 10.43

February 25, 2004

Laura Lauman,
Co-Manager, Applied Biosystems/ MDS SCIEX
and
Vice President of Discovery Proteomics and Small Molecule Business, Applied Biosystems
850 Lincoln Centre Drive
Foster City, California 94404

Re: Extension of Term of Service and Support Agreement

Dear Laura:

As you know, Ciphergen Biosystems, Inc. ("Ciphergen") and Applied Biosystems/MDS SCIEX (the "Joint Venture") entered into a Service and Support Agreement, dated April 2, 2001 (the "Original Agreement") and a letter amendment dated August 29, 2003 (the "August Letter Amendment;" and the Original Agreement together with the August Letter Amendment, the "Current Agreement").

The purpose of this letter is to confirm the agreement by and between Ciphergen and the Joint Venture to extend the term of the Current Agreement for an additional period through February 28, 2006 (the "Extension Period"). All other terms and conditions of the Current Agreement shall continue in full force and effect.

For clarity, during such Extension Period, Ciphergen (1) shall sell the PCI-1000 SELDI ProteinChip® Interface (the "Interface") only in conjunction with the Joint Venture's QSTAR® MS Instrument Systems and (2) shall not offer such Interface for sale in conjunction with the Waters-Micromass QTOF line of products.

As the duly authorized representative, please indicate the agreement of Applied Biosystems/ MDS SCIEX to the foregoing by signing both copies of this letter in the space provided below and returning one copy of this letter to me.

Best regards,

/s/ Martin Verhoef
Martin Verhoef
President, Biosystems Division

ACCEPTED AND AGREED:

Applied Biosystems/MDS SCIEX

By: /s/ Laura Lauman
Name: Laura Lauman
Title: Co-Manager
Date: 3/10/04

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EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-53530) and on Form S-3 (No. 333-106434) of Ciphergen Biosystems, Inc. of our reports dated March 9, 2004 relating to the financial statements and the financial statement schedule which appear in this Form 10-K.

/s/ PRICEWATERHOUSECOOPERS LLP

San Jose, California
March 12, 2004

QuickLinks

EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

EXHIBIT 31.1

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER
Pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002

I, William E. Rich, certify that:

1. I have reviewed this annual report of Form 10-K of Ciphergen Biosystems, Inc.;

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

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

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2004

/s/ WILLIAM E. RICH, PH.D.

William E. Rich, Ph.D.
President and Chief Executive Officer

EXHIBIT 31.1

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER Pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002

EXHIBIT 31.2

CERTIFICATION OF THE CHIEF FINANCIAL OFFICER
Pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002

I, Matthew J. Hogan, certify that:

1. I have reviewed this annual report of Form 10-K of Ciphergen Biosystems, Inc.;

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

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

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2004

/s/ MATTHEW J. HOGAN

Matthew J. Hogan
Senior Vice President and Chief Financial Officer

EXHIBIT 31.2

CERTIFICATION OF THE CHIEF FINANCIAL OFFICER Pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002

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EXHIBIT 32

CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER PURSUANT TO 18. U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Ciphergen Biosystems, Inc. on Form 10-K for the fiscal year ended December 31, 2003 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Ciphergen Biosystems, Inc.

Date: March 15, 2004

/s/ WILLIAM E. RICH, PH.D.

William E. Rich, Ph.D.
President and Chief Executive Officer

/s/ MATTHEW J. HOGAN

Matthew J. Hogan
Senior Vice President and Chief Financial Officer

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