

# ASPIRA WOMEN'S HEALTH INC.

## **FORM 10-K** (Annual Report)

Filed 03/22/05 for the Period Ending 12/31/04

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Symbol	AWH
SIC Code	2835 - In Vitro and In Vivo Diagnostic Substances
Industry	Biotechnology & Medical Research
Sector	Healthcare
Fiscal Year	12/31

# CIPHERGEN BIOSYSTEMS INC

## FORM 10-K (Annual Report)

Filed 3/22/2005 For Period Ending 12/31/2004

Address	6611 DUMBARTON CIRCLE FREMONT, California 94555
Telephone	510-505-2100
CIK	0000926617
Industry	Scientific & Technical Instr.
Sector	Technology
Fiscal Year	12/31

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

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**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, 2004**

**OR**

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

Commission file number: 000-31617

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**CIPHERGEN BIOSYSTEMS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**33-059-5156**  
(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**

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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 \$131.9 million as of June 30, 2004, 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 28, 2005 was 29,475,663 shares.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the Registrant's Proxy Statement for its 2005 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.

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**CIPHERGEN BIOSYSTEMS, INC.**

**FORM 10-K**

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## 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 revenue, gross margin, 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; competition and consolidation in the markets in which we compete; 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 general and administrative costs; decreasing sales and marketing and 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 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 and in July 2004, we launched our next-generation system, the ProteinChip System, Series 4000.

We develop, manufacture and sell our ProteinChip System family of proteomics research equipment, which includes (i) the ProteinChip System, Series 4000, 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 whose surface contains binding sites (i.e., chemistries that bind or capture specific proteins or classes of proteins). 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.

In order to better serve the needs of our varied customers, in early 2004 we formed a Biosystems Division and a Diagnostics Division. The Biosystems Division's revenues are largely derived from sales of ProteinChip Systems, arrays and certain related services to customers in clinical and basic research laboratories. Our 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, Inc. On May 23, 2000, we reincorporated in Delaware. On September 28, 2000, we had our initial public offering. On July 31, 2001, we acquired BioSeptra 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, which are media used to capture and purify proteins. On November 30, 2004, we sold BioSeptra S.A. and related assets to Pall Corporation. This is discussed further under "Recent Developments" in "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Our 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 characterize 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. Among other initiatives, 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 advances 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 or other biomolecule, such as a protein, 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.

#### **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 enrich and concentrate a rare protein from a crude biological sample in hours, a process that required days or weeks with traditional methods. Researchers can then proceed to 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. Using our ProteinChip Systems, the application of gradient wash conditions to the chromatographic surfaces of our ProteinChip 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. Our new method of purity analysis is called ProteinChip Retentate Chromatography—Mass Spectrometry (“RC-MS”).

## **Our Market Opportunity**

There are several types of laboratories that perform proteomics research and development. We believe our ProteinChip Systems 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 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.
- *Diagnostics.* The in vitro diagnostics industry manufactures and distributes products that are used to detect thousands of individual components present in human derived specimens. Many of these assays are used to specifically identify 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 2004 include our next-generation ProteinChip System (the Series 4000), Biomarker Patterns version 5.0 and CiphergenExpress Client.

- *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 working with collaborators from the University of Kuopio and Sahlgren's University Hospital in detecting Alzheimer's Disease, cancer research with Novartis, working with the University of Texas M.D. Anderson Cancer Center on ovarian cancer, and working with The Johns Hopkins School of Medicine to diagnose ovarian and other cancers.
- *Enter the Diagnostics Market with Proprietary Assays.* For the last several years, we have 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 have established 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 and ProteinChip Systems, Arrays and Software 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 and biomarker discoveries. 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**

Our *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 surfaces that capture or bind specific proteins or classes of proteins. 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. In July 2004, we introduced our next generation

ProteinChip System, the Series 4000. The Series 4000 features the Pattern Track™ biomarker discovery-to-assay process, which integrates our proprietary ProteinChip Arrays, SELDI-TOF-MS detection and Biomarker Patterns software. The Series 4000 was specifically designed to offer a complete solution for translating biomarker discoveries into predictive and quantitative assays on a single platform. We believe the Series 4000 and our Pattern Track process is the first proteomics tool that allows researchers to rapidly achieve biomarker discovery and development of biomarker assays on a single platform and enable SELDI-based assays for biological function discovery, disease diagnosis, prognosis or prediction of drug response.

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 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 customized 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 84%, 82% and 78% of revenue in 2002, 2003 and 2004, respectively, after reclassifying sales of process chromatography sorbents and related process proteomics services to discontinued operations for all periods presented due to the sale of that business in November 2004. The remainder of our revenue came from research services performed by our Biomarker Discovery Center laboratories, as well as from consulting, training, maintenance contracts and other services we provided.

We generally include a 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.

### **Diagnostics Division**

Our 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. Many of our internal research projects are done at several Biomarker Discovery Center laboratories that we have established. 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. Our Biomarker Discovery Center laboratories also provide collaborative research and development services for biomarker discovery for new diagnostic tests, as well as pharmacoproteomic services for improved drug toxicology, efficacy and theranostic assays.

We believe that biomarkers and their use in diagnostics are generally patentable by their discoverer, and therefore we and our collaborators file patents broadly upon discoveries that we believe may have commercial value. 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, published in *Cancer Research* in August 2004, 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 are currently attempting to develop a high throughput, precise and highly reproducible assay around the markers described in our *Cancer Research* paper and continue to evaluate additional markers that may improve the performance of this assay or be more amenable for use in a clinical setting.

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 by showcasing the products and demonstrating practical applications of the technology. We also seek to obtain intellectual property and

commercialization rights related to biomarkers discovered in our Biomarker Discovery Center laboratories; although we have derived no revenues to date from such rights, our goal is to generate future revenue from these commercialization rights by developing our biomarker discoveries into diagnostic tests that improve patient care. 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 Virginia Prostate Center of 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, Novartis and Pfizer. 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 potential discoveries under many of these collaborations based on our contractual agreements. For example, in some cases we have the right to commercialize diagnostic tests based on biomarkers discovered through these collaborations. To date, we have not commercialized any such discoveries.

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. In 2003 and 2004, approximately 6% and 4% of our revenue from continuing operations, respectively, came from performing such project work. Projects for the largest single customer accounted for less than 2% and 3% of total revenue from continuing operations in 2003 and 2004, respectively.

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 The Johns Hopkins University and the Eastern Virginia Medical School. We spent approximately \$1.3 million in 2002, \$1.2 million in 2003 and \$1.7 million in 2004 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 and Biomarker Discovery Center services, 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. Our sales and marketing organization as of February 28, 2005 consisted of 94 employees, 39 of whom have Ph.D. or M.D. degrees. As of February 28, 2005, we had 18 program managers and 30 field research scientists. We intend to maintain the present size of our sales and marketing organization over the next 12 months.

We formed CIPHERGEN Biosystems KK in Japan in January 1999 as a joint venture with Sumitomo Corporation to distribute our products in Japan. 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%. In March 2004, we paid \$1.0 million in cash to purchase an additional 30% ownership in CIPHERGEN Biosystems KK from SC BioSciences (a unit of Sumitomo Corporation), bringing our ownership interest to 100%.

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

## **Backlog**

CIPHERGEN typically receives a substantial portion of its product orders in the last month of the quarter. We endeavor to maintain sufficient inventory on hand to ship all products immediately upon receipt of an order. As a result, we generally have little or no backlog except for support and service revenue. Management does not believe that backlog orders at any given point in time are a meaningful indicator of our company's future business prospects.

## **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 20, "Segment Information and Geographic Data."

## Existing Customers

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

<u>Pharmaceutical and Biotechnology</u>	<u>Academic and Government</u>
Abbott Laboratories	Aaron Diamond AIDS Research Center
Abgenix	Academic Medical Center of Amsterdam
Alltech	American Type Culture Collection
Amgen	Brigham and Women's Hospital
AstraZeneca	Brown University
Aventis	Burnham Institute
Axon Neurosciences	Centers for Disease Control
Bayer	Children's Hospital, Los Angeles
Bristol-Myers Squibb	Children's Hospital of Philadelphia
Boehringer Ingelheim	Colorado Center for Reproductive Medicine
Centocor	Cornell Medical School
Cephalon	Dana Farber Cancer Center
Chugai Pharmaceuticals	Duke Medical School
DSM Biologics	Emory University
Eli Lilly	Harvard School of Public Health
Genentech	Imperial Cancer Research Foundation
GlaxoSmithKline	Imperial College Prion Unit
Human Genome Sciences	Indiana University-Purdue University
Innogenetics	INSERM
Janssen Pharmaceuticals	International Medical Center-Japan
Johnson & Johnson	The Johns Hopkins University School of Medicine
MDS Pharma	Kings College London
MediGene	Lawrence Livermore National Laboratories
Medivir	Massachusetts General Hospital
Merck	Massachusetts Institute of Technology
Mitsubishi Welpharma	McGill University
Neurochem	MD Anderson Cancer Center
Neurogenetics	Medical College of Georgia
Novartis	Medical Research Council (Cambridge)
Novo Nordisk	Memorial Sloan Kettering
Orion Pharmaceuticals	Mount Sinai Medical School
Pfizer	National Cancer Center-Japan
Proctor & Gamble	National Institutes of Health, National Cancer Institute
Protein Design Labs	Osaka University
Purdue Pharmaceuticals	Pasteur Institute
Roche	Riken Brain Science Institute
Sankyo	Rockefeller University
Schering-Plough	Royal Free Hospital
Serono	Rutgers University
Smith & Nephew	St. Bartholomew's and London School of Medicine
Sumitomo Pharmaceuticals	Stanford University
Syngenta	Thrombosis Research Institute
Takeda Chemical	Tokyo University
Tanabe Pharmaceuticals	University College London
Wyeth	University of Arizona

Yamanouchi Pharmaceuticals	University of California, Los Angeles
	University of California, San Francisco
	University of Miami
	University of Notre Dame
	University of Southern California
	University of Uppsala
	US EPA
	Virginia Prostate Center of Eastern Virginia Medical School
	Wright State University

No customer accounted for more than 10% of our revenue in 2002, 2003 or 2004.

## Research and Development

Our ProteinChip System is a single technology platform we believe can be used in many markets for a wide variety of scientific applications. We have ongoing technology development programs for our ProteinChip Arrays and reagents, high-density biochip formats, instrumentation, software and manufacturing processes.

In applied research, we are developing new applications and reagents for quantitative differential protein expression analysis, protein interaction assays and protein characterization. Our efforts are now particularly focused on quantitative analysis of low-abundance proteins present in complex samples such as plasma and serum. We have demonstrated that the surface chemistries immobilized on ProteinChip Arrays have similar protein selectivity to those chemistries immobilized on higher capacity bead formats, facilitating the transition from discovery on arrays to preparative purification on beads. Using this selectivity matching, we seek to improve the speed and efficiency of designing protein purification strategies at any scale based on the predictive information obtained using our ProteinChip Systems.

Instrumentation research and development efforts include high-sensitivity mass detection and quantitation, improvement in system resolution and mass accuracy, internal normalization, and calibration algorithms that standardize instrument performance from one to another and thus allows comparative determinations across multiple sites. In addition, we are developing new SELDI-based accessories for high resolution tandem mass spectrometry, including improvements on the ProteinChip Tandem MS Interface to significantly increase sensitivity when compared to other laser desorption/ionization (LDI) Qq-TOF devices. We introduced a new array chemistry that incorporates the desorption matrix for LDI Qq-TOF directly on the array surface, which results in an additional increase in sensitivity with reduced chemical noise as compared to standard methods. We also have ongoing software development projects to further improve the functionality, expand the applications, and strengthen the data management and analysis capabilities of our ProteinChip System.

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. We rely upon outside suppliers for many components of our ProteinChip Systems. Final assembly and quality control of our ProteinChip Readers are performed by us in our Fremont 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.

Generally, we acquire components, accessories and manufacturing services on an individual purchase order basis. However, from time to time we have entered into contracts with a limited number of third parties in the ordinary course of business to manufacture products to our specifications, supply components, supply accessories, provide software and provide manufacturing services. Currently we have approximately seven such active contracts. 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. We endeavor to maintain a sufficient stock of critical parts to enable us to continue production for at least three to six months in the event we lose a single-source supplier, during which time we believe we would be able to secure an alternate source. However, in one case, loss of a critical contract manufacturing service for more than six months could adversely affect virtually all of our revenue from ProteinChip Arrays, and the unavailability of our consumable products eventually could result in decreased sales of our ProteinChip Systems as well.

## **Intellectual Property**

Our intellectual property includes a portfolio of owned, co-owned or licensed patents and patent applications. As of December 31, 2004, our patent portfolio included 21 issued U.S. patents, 124 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 our business including our core SELDI technology and its applications, protein biochips, instrumentation, software and biomarkers. The issued patents covering the SELDI and RC-MS technologies expire at various times from 2013 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. We 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 us 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. Through December 31, 2004, we had paid or accrued a total of approximately \$1.7 million in such royalties.

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, The 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. Our intellectual property portfolio also includes copyrights on our ProteinChip Software, as well as registered U.S. trademarks for, among other things, the names “CIPHERGEN” 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 encounter intense competition from a number of companies that offer competing products using alternative technologies. Current competition comes primarily from companies providing products that incorporate established technologies, such as gel electrophoresis, liquid chromatography and mass spectrometry.

In order to compete effectively, we need to demonstrate the advantages of our ProteinChip Systems over alternative technologies and products. We also must 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 Applied Biosystems, 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 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 major 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. To date, we have not made

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 may be implemented in the future that may 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, 2004, we had 255 full-time employees worldwide, including 121 in sales and marketing, 59 in research and development, 41 in manufacturing and 34 in administration. 90 of our employees on December 31, 2004 had M.D. degrees or Ph.D. degrees in chemistry, biology or biochemistry, and many are experts in software and engineering. We also had an additional 17 individuals engaged as independent contractors. In January 2005, we took certain cost-cutting measures, consisting primarily of headcount reductions, which did not constitute an exit or disposal activity as defined by Statement of Financial Accounting Standards No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." At February 28, 2005, we had 220 employees, consisting of 94 in sales and marketing, 53 in research and development, 37 in manufacturing and 36 in administration; 72 of these employees have M.D. or Ph.D. degrees. 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**

We routinely file 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>.

We maintain 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	Lease Expiration Date
Fremont, California	61,000 sq. ft.	Research and development, Biomarker Discovery Center laboratory, manufacturing, marketing and sales, administration	2008
Fresno, California	1,000 sq. ft.	Research and development	2006
Galveston, Texas	500 sq. ft.	Sales demonstration laboratory	August, 2005
Malvern, Pennsylvania	3,000 sq. ft.	Biomarker Discovery Center laboratory	September, 2005
Woburn, Massachusetts	3,000 sq. ft.	Sales demonstration laboratory	August, 2005
Beijing, China	3,000 sq. ft.	Sales, research and development, technical support services	August, 2005
Copenhagen, Denmark	2,000 sq. ft.	Biomarker Discovery Center laboratory, sales	2006
Goettingen, Germany	600 sq. ft.	Sales	May, 2005
Guildford, England	4,000 sq. ft.	Sales	2010
Hong Kong	500 sq. ft.	Sales	May, 2005
Osaka, Japan	600 sq. ft.	Sales	2006
Yokohama, Japan	8,000 sq. ft.	Biomarker Discovery Center laboratory, sales, service, administration	2007
Zurich, Switzerland	600 sq. ft.	Sales	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 Galveston, Malvern, Beijing and Goettingen facilities when those leases expire in 2005, and to close our facilities in Woburn and Hong Kong when those leases expire. We believe our other existing space is suitable and will be sufficient for our needs through the end of 2005, although we may decide to add to our facilities if warranted by our growth during 2005 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 2004.

## 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 28, 2005 was \$3.10 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
<b>Fiscal 2003:</b>		
First Quarter	\$ 5.91	\$ 3.05
Second Quarter	10.59	4.35
Third Quarter	13.71	6.71
Fourth Quarter	13.97	9.78
<b>Fiscal 2004:</b>		
First Quarter	11.68	7.50
Second Quarter	9.45	6.09
Third Quarter	6.00	2.61
Fourth Quarter	4.71	3.05

We currently expect to retain future earnings, if any, for use in the operation and expansion of our business. We have not paid any cash dividends, nor do we anticipate paying any cash dividends in the foreseeable future. As of February 28, 2005, there were 29,475,663 shares of our common stock issued and outstanding and held by approximately 153 holders of record. There are approximately 3,000 beneficial owners 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 \$1.9 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 effective interest rate is 5.85% per annum. 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 \$2,677,000 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 a 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 107.5% of the principal balance upon a change in control of CIPHERGEN prior to 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, we settled our litigation with Molecular Analytical Systems, Inc., LumiCyte, Inc. and T. William Hutchens. As part of this settlement, we 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 ("SRS") in February 1995, subsequently amended in June 2000. The agreement defines several milestones to be achieved by SRS leading to the development by SRS of certain new, lower cost, higher performance components for us which could replace existing components used in our ProteinChip Systems. It provides for the issuance of a fixed number of CIPHERGEN common shares upon the attainment of each development milestone. No shares were issued under this agreement in 2003 or 2004. A maximum of 96,750 additional shares of common stock, which is approximately 0.3% of total shares outstanding, could be issued if and when the remaining milestones are completed. 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**

We currently maintain three equity-based compensation plans that have been approved by our 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 a consultant 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, 2004.

**Equity Compensation Plan Table**

<u>Plan Category</u>	Number of Shares of Common Stock to		Number of Shares of Common Stock Remaining
	be Issued Upon Exercise of Outstanding Options and Rights	Weighted-Average Exercise Price of Outstanding Options and Rights	Available for Future Issuance Under Equity Compensation Plans (excluding shares reflected in the first column)
Equity compensation plans approved by security holders	5,090,362(1)	\$ 6.01	1,041,868(2)
Equity compensation plans not approved by security holders	—	—	96,750(3)
<b>Total</b>	<u><b>5,090,362</b></u>	<b>\$ 6.01</b>	<u><b>1,138,618</b></u>

- (1) Includes outstanding stock options for 911,188 shares under the 1993 Plan and 4,114,156 shares under the 2000 Plan. Also includes 65,018 shares after giving effect to estimated purchases under the ESPP for the purchase period that will end on May 1, 2005 based on participant contributions through December 31, 2004.
- (2) Includes 791,828 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 900,000 shares on January 1, 2005. The data presented in this table was calculated as of December 31, 2004 and does not reflect the January 1, 2005 increase. Also includes 250,040 shares for the ESPP. On January 1 of each year during the term of the ESPP, the total number of shares available for sale 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 180,000 shares on January 1, 2005 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. On November 30, 2004 we completed the sale of our BioSeptra business. Accordingly, the information set forth in the table below has been restated to reflect the BioSeptra business as a discontinued operation.

	Years Ended December 31,				
	2004	2003	2002	2001	2000
(in thousands, except per share data)					
<b>Statement of Operations Data:</b>					
Revenue:					
Products	\$ 31,378	\$ 35,872	\$ 23,572	\$ 13,370	\$ 7,358
Products revenue from related parties	—	—	827	1,192	1,064
Services	8,803	7,766	4,809	1,794	513
Total revenue	40,181	43,638	29,208	16,356	8,935
Cost of revenue:					
Products	11,199	11,911	6,761	4,216	2,774
Products revenue from related parties	—	—	334	434	587
Services	3,876	3,426	2,277	628	119
Litigation settlement	—	7,257	—	—	—
Total cost of revenue	15,075	22,594	9,372	5,278	3,480
Gross profit	25,106	21,044	19,836	11,078	5,455
Operating expenses:					
Research and development	19,268	23,628	19,593	12,428	7,475
Sales and marketing	26,376	21,335	17,960	13,552	9,001
General and administrative	14,136	14,815	14,422	12,925	11,322
Amortization of intangible assets	—	—	—	152	318
Total operating expenses	59,780	59,778	51,975	39,057	28,116
Loss from operations	(34,674)	(38,734)	(32,139)	(27,979)	(22,661)
Interest and other income (expense), net	(2,145)	(211)	1,435	3,278	2,357
Loss from continuing operations before income taxes	(36,819)	(38,945)	(30,704)	(24,701)	(20,304)
Income tax provision (benefit) from continuing operations	109	(47)	(44)	140	—
Net loss from continuing operations	(36,928)	(38,898)	(30,660)	(24,841)	(20,304)
Discontinued operations:					
Income (loss) from discontinued operations, net of tax	(1,440)	2,151	1,588	(971)	—
Gain from sale of BioSeptra business, net of tax	18,527	—	—	—	—
Net income (loss) from discontinued operations	17,087	2,151	1,588	(971)	—
Dividend related to beneficial conversion feature of preferred stock	—	—	—	—	(27,228)
Net loss attributable to common stockholders	\$ (19,841)	\$ (36,747)	\$ (29,072)	\$ (25,812)	\$ (47,532)
Basic and diluted net loss per share attributable to common stockholders(1):					
Net loss per share from continuing operations	\$ (1.26)	\$ (1.38)	\$ (1.14)	\$ (0.94)	\$ (4.09)
Net income (loss) per share from discontinued operations	0.58	0.07	0.06	(0.03)	—
Net loss per share attributable to common stockholders	\$ (0.68)	\$ (1.31)	\$ (1.08)	\$ (0.97)	\$ (4.09)
Weighted average shares used in computing basic and diluted net loss per share attributable to common stockholders(1)					
	29,244	28,154	26,965	26,512	11,635

	As of December 31,				
	2004	2003	2002	2001	2000
	(in thousands)				
<b>Balance Sheet Data:</b>					
Cash, cash equivalents and investments in securities	\$ 37,567	\$ 47,316	\$ 42,541	\$ 77,124	\$ 107,633
Working capital	39,932	51,970	47,667	70,890	108,020
Total assets	74,377	102,026	87,615	106,816	118,948
Long-term debt and capital lease obligations, including current portion	29,397	31,865	2,816	2,610	840
Total stockholders' equity	26,715	47,892	68,354	93,229	113,152

(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. These systems consist of a ProteinChip Reader, ProteinChip Software and related accessories which are used in conjunction with our consumable ProteinChip Arrays and ProteinChip Kits. 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. On July 31, 2001, CIPHERGEN acquired the BioSeptra® process chromatography business from Invitrogen Corporation; this business was subsequently sold to Pall Corporation on November 30, 2004.

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. On March 23, 2004, we purchased the remaining 30% ownership interest in CIPHERGEN Biosystems KK. In July 2004, we launched the ProteinChip System, Series 4000, our next generation ProteinChip System.

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 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 100%. In addition, we acquired the BioSeptra process chromatography business in 2001, which we sold for a gain in 2004. 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 early 2004, we formed a Diagnostics Division and increased our efforts to discover protein biomarkers and panels of biomarkers that can be developed into protein molecular diagnostic tests that improve patient care. Since our inception we have incurred significant losses and as of December 31, 2004, we had an accumulated deficit of \$160.4 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 by adding our 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.

Our expenses have consisted primarily of materials, contracted manufacturing services, labor and overhead costs to manufacture our ProteinChip Systems and ProteinChip Arrays and to provide customer services; 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 2005 relative to 2004 due to increased unit sales of our ProteinChip Systems, arrays and services in 2005. We also expect cost of revenue to decrease slightly as a percent of total revenue as a result of anticipated higher production volumes and diminishing manufacturing inefficiencies inherent in the transition to production of our ProteinChip System, Series 4000, which we introduced in mid-2004. We expect our research and development expenses to decrease in 2005 relative to 2004 due to the transition of the ProteinChip System, Series 4000 into manufacturing and scaling back selected other projects, which has led to reduced research and development headcount as well as reduced use of outside contractors and services. We anticipate that these decreases will be 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 sales and marketing expenses to decrease in 2005 relative to 2004 as a result of a smaller sales force and reduced marketing expenses. We expect our general and administrative expenses to increase slightly in 2005 relative to 2004 due to normal salary increases and additions to staffing, offset largely by a decline in stock-based compensation expense associated with our initial public offering. As a result, we expect to incur losses at least for 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 as well as begin achieving revenue from our Diagnostics Division.

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.

### **Recent Developments**

On November 30, 2004, we completed the sale of our process chromatography business, consisting of our wholly-owned French subsidiary, BioSeptra S.A., along with certain other related assets (together, the “BioSeptra business”), to Pall Corporation for net proceeds of approximately \$27.0 million, and an additional \$1.0 million was deposited in an escrow account. We recorded a gain of \$18.5 million on the

sale, net of tax and approximately \$321,000 of transaction costs, in net income from discontinued operations. The BioSeptra business operating results have been removed from our results of continuing operations for all periods presented.

### **Critical Accounting Policies and Estimates**

Our discussion and analysis of our financial condition and results of operations are based upon our 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 us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our 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.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our 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 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. We make no distinction between a standard warranty and a maintenance (extended warranty) contract, as coverage under both the standard and extended warranty maintenance contracts is identical. Because we do not offer traditional warranties but enhance them such that they are identical to our separately priced maintenance contracts, we believe it is appropriate to account for them the same way. 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.

For revenue from Biomarker Discovery Center contracts and other consulting contracts, if elements are specifically tied to a separate earnings process, then revenue related to an element is recognized when the specific performance obligation associated with that element is completed. When revenues for an element are not specifically tied to a separate earnings process, they are recognized ratably over the term of the agreement. Revenue from Biomarker Discovery Center services and other consulting contracts is recognized at the completion of key stages in the performance of the service as described in our agreement with the customer. Often there is only a single element, namely delivery of a scientific report upon completion of our analysis of customer samples, in which case we recognize all the revenue upon the conclusion of the project when all deliverables have been provided to the customer. Revenue is deferred for fees received before earned. Our training is billed based on published course fees and we generally recognize revenue as the training is provided to the customer.

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, 3-5 years; computer equipment and software, 3 years; furniture and fixtures, 5 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 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 BioSeptra in 2001 and the increase in our ownership of CIPHERGEN Biosystems KK in 2002 and 2004. The goodwill related to BioSeptra was written off against the gain on the sale of the BioSeptra business in 2004. 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, 2003 and 2004, 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 costs 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, when we adopt SFAS No. 123 (Revised), "Share-Based Payment", effective July 1, 2005, it could have a material impact on our financial position and results of operations, although we have not yet determined this impact.

#### *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 for 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, 2004, 2003 and 2002*

In the following discussion of our results of operations, results related to the BioSeptra business have been reclassified as discontinued operations for all periods discussed.

## *Revenue*

Product revenue was \$31.4 million in 2004, \$35.9 million in 2003, and \$24.4 million in 2002. The \$4.5 million or 13% decrease in product revenue from 2003 to 2004 was primarily the result of a 22% decrease in revenue from sales of our ProteinChip Systems, accessories and software. This was largely due to a 13% decline in unit sales of ProteinChip Systems, reflecting a more competitive selling environment. In addition, we experienced a 10% decrease in average revenue per system sold due to lower list prices for the Series 4000 as well as increased discounting as a result of the competitive environment and slightly lower accessory sales when comparing the two periods. This was partially offset by a 20% increase in array and other consumables sales driven by greater unit sales to a larger installed base of customers.

The \$11.5 million or 47% increase in product revenue from 2002 to 2003 was largely the result of a 39% increase in revenue from sales of our ProteinChip Systems, accessories and software, as well as an 81% increase in revenue from our arrays and consumables. The increase in systems and related revenue was due to a 5% increase in unit sales of ProteinChip Systems and a 33% increase in average revenue per system sold due to an increase in accessory sales and a greater proportion of higher-end, more automated configurations. These results were aided by increasing the size of our sales force during this period. The increase in array and consumable sales was largely driven by greater unit sales to a larger installed base of customers as well as a slight increase in average selling price due to a 5% increase in list price at the start of 2003. In Japan, we price our products in Japanese yen, and approximately \$335,000 of the increase in product revenue in 2003 can be attributed to the weakening of the U.S. dollar against the Japanese yen.

Service revenue was \$8.8 million in 2004, \$7.8 million in 2003, and \$4.8 million in 2002. The \$1.0 million or 13% increase in service revenue from 2003 to 2004 was primarily due to \$1.8 million higher revenue from maintenance contracts, training and consulting services driven by growth in our installed base. This was partially offset by a decline of \$776,000 in revenue from Biomarker Discovery Center services; we redirected much of our selling effort towards ProteinChip System sales and away from service projects during this period, in part due to our desire to focus more of our Biomarker Discovery Center resources on research for our own account.

The \$3.0 million or 61% increase in service revenue from 2002 to 2003 was primarily due to a \$2.5 million increase in revenue from maintenance contracts, training and consulting services driven by growth in our installed base. In addition, revenue from collaboration services handled through our Biomarker Discovery Center laboratories increased \$484,000 primarily due to additional projects undertaken for pharmaceutical company clients.

We expect total 2005 revenue of approximately \$44-48 million. We expect that revenues for the first quarter of 2005 will be approximately \$8-9 million, with increasing quarterly revenue thereafter in 2005.

## *Cost of Revenue*

Cost of product revenue was \$11.2 million in 2004, \$11.9 million in 2003, and \$7.1 million in 2002. The \$712,000 or 6% decrease in cost of product revenue from 2003 to 2004 resulted primarily from a decrease in unit sales of our ProteinChip Systems. The gross margin for product revenue decreased from 67% in 2003 to 64% in 2004. This decrease was largely due to a decrease in the average selling price of our systems. In the third quarter, we offered special, introductory pricing for one quarter for our newly introduced ProteinChip System, Series 4000; we also have been discounting our remaining stock of older models of our ProteinChip System. In the six months of 2004 after launching the Series 4000, this new product accounted for 81% of our unit sales, while older model ProteinChip Systems and Tandem MS Interfaces accounted for 14% and 5%, respectively. Cost of product revenue in 2004 also included an increase in the provision for excess and obsolete inventory of \$1.2 million. This reduced the gross margin for product revenue by 4% of product revenue. The increase in the provision for excess and obsolete inventory was largely to provide an appropriate reserve for our older ProteinChip Systems in light of the

introduction of the new Series 4000 model. This was offset by the sales of ProteinChip Systems, Series 4000, that were built with \$1.3 million of components previously charged to research and development expense prior to the product achieving technological feasibility, thus favorably impacting the gross margin by 4% of product revenue.

The \$4.8 million or 68% increase in cost of product revenue from 2002 to 2003 resulted from an increase in unit sales of our ProteinChip Systems, accessories, software, arrays and other consumables. The gross margin for product revenue decreased from 71% in 2002 to 67% in 2003. The amortization of certain expenses related to our litigation settlement reduced the 2003 gross margin for product revenue by approximately 2% of product revenue. The decrease in gross margin from 2002 to 2003 was also due to lower gross margins for arrays and consumables resulting from lower yields in production, as well as product mix, particularly a higher number of Biomek 2000 Workstations. Lower production yields for our arrays in 2003, as we raised our quality specifications to improve product performance, reduced our gross margin for product revenue by approximately 1% of product revenue in 2003 relative to 2002. In addition, the Biomek 2000, which we purchase from Beckman Coulter and resell as an accessory for our ProteinChip Systems, carries significantly lower profit margins than products we manufacture ourselves.

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. Stock-based compensation expense in cost of product revenue was \$45,000 in 2004, \$81,000 in 2003, and \$124,000 in 2002.

Cost of service revenue was \$3.9 million in 2004, \$3.4 million in 2003, and \$2.3 million in 2002. From 2003 to 2004, cost of service revenue increased \$450,000 or 13% due to increased field service costs to provide service for a greater number of maintenance contracts, partially offset by decreased collaboration expenses associated with revenue-generating contracts at our Biomarker Discovery Center laboratories. The gross margin for service revenue remained at 56% for 2003 and 2004.

From 2002 to 2003, cost of service revenue increased \$1.1 million or 50% 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. During 2003, the average number of our field service engineers was lower than for the corresponding period of 2002; at the same time, the installed base of our ProteinChip Systems increased. Thus the number of systems supported on a per-person basis increased on average, resulting in a lower cost per maintenance contract. In addition, individual Biomarker Discovery Center contracts proved to be more profitable in 2003 than in 2002. With the benefit of more experience, we were better able to gauge the amount and complexity of the work and negotiate pricing accordingly. These increases in gross margin were partially offset by the amortization of expenses associated with our litigation settlement, which reduced the 2003 gross margin for service revenue by approximately 2% of service revenue.

We expect our overall gross margin to be in the 65-68% range during 2005.

#### *Litigation Settlement*

On May 28, 2003, we settled our litigation with Molecular Analytical Systems, Inc. ("MAS"), LumiCyte, Inc. ("LumiCyte"), and T. Williams Hutchens whereby we acquired the undisputed exclusive rights granted to MAS under patents licensed from Baylor College of Medicine and the parties released all claims against each other. These patent rights refer to technology known as SELDI-TOF-MS, and provide us with an exclusive worldwide license and right to sublicense the technology and to commercialize any and all products, information and services derived from the technology without limitation. Furthermore,

LumiCyte assigned all rights granted to it from MAS and related to the Baylor College of Medicine patents to us without restriction. 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. Although \$10.0 million is the maximum amount that could be payable, we feel it is likely that in the remaining approximately nine years until May 2014, we will achieve cumulative sales sufficient to reach this upper limit. Through December 31, 2004, we paid or accrued a total of \$1.7 million in such license fees.

The total cost of the litigation settlement, including future license fees, is expected to be \$20.8 million. We cannot predict the amount of future revenue we will earn over the remaining life of the technology. Therefore we do not relate the license fees to revenue. Rather, we view our license rights as an intangible asset we purchased which we amortize over a 17-year useful life on a straight line basis. The 17-year useful life started in April 1997, when we originally acquired our license rights (subsequently the subject of a litigation settlement), and expires in the second calendar quarter of 2014. We believe that researchers will have a need to do advanced protein analysis for far longer than the remaining approximately nine years and, because of the complexity of that task, multiple technologies will be employed. Largely due to the complexity of analyzing proteins, we do not believe that an as-yet-undeveloped technology will be developed by others that would obsolete the use of ProteinChip technology, although undoubtedly alternate approaches will be introduced in the future at the same time as we continue to evolve and improve the performance of our technology. Nor do we foresee ourselves introducing a new technology that would supplant the SELDI technology. As an analogy, polymerase chain reaction (PCR) technology was invented in 1983 and continues to be a key method used in genetic research today. On the other hand, once the fundamental patents protecting the ProteinChip technology expire, we believe that multiple parties will want to enter the market using the technology. Hence, we have concluded that a 17-year useful life is appropriate.

Of the total anticipated settlement costs of \$20.8 million, \$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. \$906,000 was amortized to cost of revenue for the remainder of 2003, \$1.2 million was amortized to cost of revenue in 2004, and the remaining \$11.4 million will be amortized to cost of revenue in future periods through the second quarter of 2014. The cost is being prorated between cost of products revenue and cost of services revenue each month based on the ratio of SELDI-based products revenue to SELDI-based services revenue.

#### *Operating Expenses*

##### *Research and Development*

Research and development expenses were \$19.3 million in 2004, \$23.6 million in 2003, and \$19.6 million in 2002. From 2003 to 2004, research and development expenses decreased \$4.4 million or 18% primarily due to a decrease of \$2.5 million in salaries, payroll taxes and employee benefits, excluding our Biomarker Discovery Center laboratories, due to a decline in research and development staff resulting primarily from the completion of our Series 4000 development program as well as the cancellation or scaling back of various early-stage research and development projects in line with our cost reduction efforts. These actions also resulted in a decrease of approximately \$1.6 million for engineering parts and other project materials, excluding our Biomarker Discovery Center laboratories. These were partially

offset by an increase of approximately \$907,000 in Biomarker Discovery Center activities related to projects targeting the discovery and development of biomarkers by our Diagnostics Division. In addition, stock-based compensation expense declined \$150,000.

From 2002 to 2003, research and development expenses increased \$4.0 million or 21% primarily due to an increase of \$2.4 million in materials and supplies used in the development of new products. Excluding our Biomarker Discovery Center laboratories, payroll and related costs increased approximately \$884,000 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 lower than it was at the end of 2002. The expenses of our Biomarker Discovery Center laboratories increased \$696,000, largely due to an increase in staffing which resulted in an increase of \$247,000 in payroll and related costs, and an increase in lab supplies and project materials of \$369,000. These increases were partially offset by a decline of \$406,000 in costs of outside services for instrument and array development. 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 or 2004.

Stock-based compensation expense in research and development expenses, excluding the milestone payment described above, was an expense of \$37,000 in 2004 and \$187,000 in 2003, and a benefit of \$36,000 in 2002.

We expect research and development expenses to decline in 2005 relative to 2004 due to having fewer research and development employees in 2005 as well as slowing or canceling selected early-stage research and development programs in our Biosystems Division as part of our efforts to control expenses, partially offset by an increase in our research and development activities associated with our Diagnostics Division.

### *Sales and Marketing*

Sales and marketing expenses were \$26.4 million in 2004, \$21.3 million in 2003, and \$18.0 million in 2002. From 2003 to 2004, sales and marketing expenses increased \$5.0 million or 24%, largely due to a \$1.6 million increase in salaries, payroll taxes and employee benefits in line with a higher average number of sales and marketing employees in 2004 compared to 2003, as well as an \$816,000 increase in travel costs due to the higher average headcount in 2004 and increased travel related to the introduction of our new ProteinChip System, Series 4000, in July 2004 and the new Diagnostics Division which was formed in early 2004. Largely due to the new product introduction, the cost of advertising, trade shows and other promotional activities increased approximately \$772,000; equipment costs, consisting primarily of depreciation of demonstration ProteinChip Systems, increased approximately \$413,000; and ProteinChip Arrays and lab supplies used for customer demonstrations increased approximately \$326,000. These increases were partially offset by a decline of \$181,000 in stock-based compensation expense.

From 2002 to 2003, sales and marketing expenses increased \$3.4 million or 19%, largely due to higher payroll-related costs as a result of a 16% increase in the sales and marketing staff, exclusive of the CIPHERGEN Biosystems KK acquisition, thereby increasing payroll and related costs approximately \$1.0 million. Depreciation and other equipment expenses increased \$317,000, largely due to an increase in demonstration equipment. The consolidation of CIPHERGEN Biosystems KK's financial statements 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.

Stock-based compensation expense in sales and marketing expenses was \$93,000 in 2004, \$274,000 in 2003, and \$398,000 in 2002.

We expect sales and marketing expenses to decrease in 2005 relative to 2004 as a result of a smaller sales force and decreased marketing expenses.

### *General and Administrative*

General and administrative expenses were \$14.1 million in 2004, \$14.8 million in 2003, and \$14.4 million in 2002. From 2003 to 2004, general and administrative expenses decreased \$679,000 or 5%, largely driven by a \$2.3 million reduction in legal fees which resulted primarily from the settlement of our litigation in 2003 and more selective patent activities in 2004, and a decrease of \$449,000 in stock-based compensation expense, partially offset by increases of \$549,000 in payroll and related expenses and \$331,000 in travel costs, both largely related to the formation of the Diagnostics Division in early 2004, a \$636,000 increase in accounting and audit fees almost entirely due to compliance with the Sarbanes-Oxley Act of 2002, and a \$417,000 increase in the portion of occupancy costs allocated to administrative departments largely due to the shift in employee mix following reductions in research and development headcount.

From 2002 to 2003, general and administrative expenses increased \$393,000 or 3%, largely driven by an 11% increase in the administrative staff, exclusive of the CIPHERGEN Biosystems KK acquisition, thereby increasing payroll and related costs approximately \$454,000. 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. Accounting and audit fees increased approximately \$333,000, partly due to the increasing scope and complexity of our international operations. The consolidation of CIPHERGEN Biosystems KK's financial statements 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.

Stock-based compensation expense in general and administrative expenses was \$427,000 in 2004, \$876,000 in 2003, and \$1.6 million in 2002.

We expect general and administrative expenses to increase slightly in 2005 relative to 2004 due to normal salary increases and additions to staffing, offset largely by a decline in stock-based compensation associated with our initial public offering.

### *Interest and Other Income (Expense), Net*

Interest income was \$505,000 in 2004, \$702,000 in 2003, and \$1.5 million in 2002. The decrease of \$197,000 from 2003 to 2004 was primarily due to lower average investment balances. The decrease of \$841,000 from 2002 to 2003 was due to lower average investment balances and declining interest rates.

Interest expense was \$2.0 million in 2004, \$763,000 in 2003, and \$43,000 in 2002. The increase of \$1.2 million from 2003 to 2004 was primarily due to an increase of \$1.2 million in interest expense related to the \$30.0 million convertible senior notes issued in August 2003, of which \$344,000 was an increase in amortization expense for the beneficial conversion feature associated with the notes. The increase of \$720,000 from 2002 to 2003 was largely due to the issuance of the convertible senior notes in August 2003, resulting in an increase in interest expense of \$676,000 of which \$192,000 was an increase attributable to the amortization of the beneficial conversion feature associated with the notes.

Other income (expense) was \$649,000 of expense in 2004, \$150,000 of expense in 2003, and \$65,000 of expense in 2002. In 2004, other expense of \$649,000 was due mainly to approximately \$373,000 in expense associated with the amortization of issuance costs for the convertible senior notes and foreign exchange losses of approximately \$307,000, largely due to the decline of the U.S. dollar against the euro, related to our U.S. dollar bank accounts in Europe. Subsequent to our acquisition of majority control of CIPHERGEN Biosystems KK on August 31, 2002 and prior to our acquisition of 100% control of CIPHERGEN Biosystems KK at the end of the first quarter of 2004, we attributed a share of this joint venture's income or losses to SC BioSciences' (a subsidiary of Sumitomo Corporation) minority interest. For 2004, we attributed \$0 of loss to minority interest, as cumulative losses attributable to the minority shareholder exceeded previous income. For 2003 and 2002, we attributed \$133,000 and \$32,000 of the joint venture's income to minority interest, respectively.



## 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, 2004 we had net operating loss carryforwards of approximately \$122.2 million for federal and \$15.7 million for state tax purposes. If not utilized, these carryforwards will begin to expire beginning in 2009 for federal purposes and 2005 for state purposes. We also have research credit carryforwards of approximately \$4.0 million and \$3.7 million for federal and state tax purposes, respectively. If not utilized, the federal research credit carryforwards will expire in various amounts beginning in 2011. 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 have incurred income tax liabilities primarily in France and Japan, 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 liabilities in France and Japan. We fully utilized our French net operating loss carryforwards in 2003, resulting in higher French income tax liability in 2003 when BioSeptra generated net income, although this was followed in 2004 by a net loss. We fully utilized our Japanese net operating loss carryforwards in 2004, resulting in higher 2004 Japanese income tax liability.

## Income (Loss) From Discontinued Operations, Net of Tax

Discontinued operations includes all revenue, cost of revenue, operating expenses, interest expense, other income (expense) and tax provisions related to our BioSeptra business, which was sold to Pall Corporation on November 30, 2004. Income (loss) from discontinued operations was \$1.4 million of loss in 2004, \$2.2 million of income in 2003, and \$1.6 million of income in 2002.

The operating results of the BioSeptra business are presented in the following table (in thousands):

	Eleven Months		
	Ended November 30,	Years Ended December 31,	
	2004	2003	2002
Revenue	\$ 8,395	\$ 14,734	\$ 10,092
Gross profit	4,921	9,483	6,706
Operating expenses	6,281	6,629	4,937
Operating income	(1,360)	2,854	1,769
Income (loss) before income taxes	(1,377)	3,605	1,693
Income tax provision	63	1,454	105
Income (loss) from discontinued operations, net of tax	(1,440)	2,151	1,588

The decrease in income from discontinued operations, net of tax, of \$3.6 million in 2004 relative to 2003 resulted primarily from a revenue decrease of \$5.2 million or 38% through the date of sale compared to the same eleven month period in 2003, as well as the shorter comparative period in 2004. BioSeptra's business is characterized by a relatively low number of orders for large quantities of customer-specific products, often \$250,000 to \$1.5 million or more per order, that are utilized and consumed by pharmaceutical customers to manufacture biological therapeutics. Filling these large orders entails a lengthy and highly controlled manufacturing process at BioSeptra, and customers cannot tolerate batch-to-batch variability, so customers typically order several years of supply to be manufactured at one time and provided to them in a few large deliveries for storage in environmentally-controlled facilities. Orders from an individual customer may not recur from year to year or may vary significantly in volume from year to year due to the customer's rate of consumption. The majority of the increase in BioSeptra's revenue from

2002 to 2003, and the decrease from 2003 to 2004, is due to the increased level of such orders occurring in 2003 that did not occur in 2002 or 2004. BioSeptra generally prices its products in euros. Revenue and operating income benefited in 2004 relative to 2003 by approximately \$1.3 million and \$936,000, respectively, due to the weakening of the U.S. dollar against the euro in 2004.

#### *Gain From Sale of BioSeptra Business, Net of Tax*

The \$18.5 million gain we recognized on the sale of our BioSeptra business is summarized as follows (in thousands):

<b>Net proceeds:</b>	
Cash proceeds received	\$ 28,376
Less: Post-closing adjustment owed to buyer	(1,044 )
Less: Transaction costs	(321 )
	<u>27,011</u>
<b>Cost basis:</b>	
Accounts receivable, net, and other current assets	2,795
Inventories	5,294
Property, plant and equipment, net	6,081
Other tangible assets	210
Patents	210
Developed product technology	2,828
Goodwill	1,380
Accounts payable and accrued liabilities	(1,976 )
Capital lease obligations	(2,978 )
Other long-term liabilities	(629 )
Cumulative translation adjustment	(4,731 )
	<u>8,484</u>
<b>Gain on sale of BioSeptra business</b>	<b><u>\$ 18,527</u></b>

In addition, \$1.0 million was placed in an interest-bearing escrow account for one year, upon which claims for selling price adjustments may be made by the buyer. At the end of one year, any residual will be paid to CIPHERGEN and be treated as an additional gain on the sale.

#### **Liquidity and Capital Resources**

From our inception through December 31, 2004, we have financed our operations principally with \$183.7 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 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. We also received net proceeds of \$27.0 million from the sale of our BioSeptra business in November 2004. Cash, cash equivalents and investments in securities at December 31, 2004 were \$37.6 million, compared to \$47.3 million at December 31, 2003. Working capital at December 31, 2004 was \$39.9 million, compared to \$52.0 million at December 31, 2003. The decrease was principally due to a \$9.7 million decrease in cash and investments, as well as a \$5.8 million decrease in working capital from the sale of our BioSeptra business. In addition, there was a \$2.3 million decrease in accounts receivable, exclusive of the BioSeptra sale, reflecting the decline in revenue from continuing operations in 2004 compared to 2003. These decreases were partially offset by a \$3.9 million increase in inventories, exclusive of the BioSeptra sale, which largely resulted from stocking up

to build the new ProteinChip System, Series 4000, which was introduced in 2004, as well as lower than expected instrument sales. Long-term debt and capital lease balances at December 31, 2004 totaled \$29.4 million, compared to \$31.9 million at December 31, 2003, largely due to the sale of BioSeptra and the transfer of associated capital lease obligations to the buyer.

Net cash used in operating activities was \$32.5 million in 2004 compared to \$20.6 million in 2003. Including discontinued operations, revenue decreased by \$9.8 million in 2004 compared to 2003, resulting in less cash collected in 2004. Cash used in operating activities was mainly to fund inventory purchases, payroll and operating expenses. Also, more cash was used in 2004 to pay interest, as the first two interest payments on our convertible senior notes fell due in 2004. Net cash used in operating activities was \$20.6 million in 2003 compared to \$27.3 million in 2002. More cash was collected from customers in 2003 as compared to 2002 due to higher sales in 2003. This increase in cash enabled us to fund higher operating expenses and inventory purchases as well as to pay \$3.0 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.

Net cash provided by investing activities was \$34.0 million in 2004 compared to net cash used in investing activities of \$4.1 million in 2003. Net cash provided by investing activities in 2004 consisted primarily of \$28.1 million received from the sale of our BioSeptra business, net of transaction costs related to the sale, and maturities and sales of investment securities of \$12.1 million, partly offset by purchases of property and equipment of \$4.6 million, payments totaling approximately \$1.0 million for a technology license related to our litigation which was settled in 2003, and a payment of \$1.0 million for the remaining 30% ownership interest in our Japanese subsidiary. Net cash used in investing activities was \$4.1 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 and payments of \$613,000 for a technology license related to our litigation which was settled in 2003, 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. We anticipate capital expenditures of approximately \$3-4 million in 2005.

Net cash provided by financing activities was \$792,000 in 2004 compared to \$31.0 million in 2003. Net cash provided by financing activities in 2004 was derived primarily from issuances of common stock under our stock plans of \$1.2 million and the repayment of stockholder loans in the aggregate principal amount of \$744,000. These were partly offset by \$1.2 million of debt repayments. 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 \$1.9 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, 2004, 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.

We currently believe that current cash resources will be sufficient to maintain current and planned operations at least through the next twelve months. We currently expect to fund expenditures for capital requirements as well as liquidity needs from a combination of available cash, marketable securities, sales of assets, and long-term debt. We will be required to raise additional capital at some point in the future, which might be achieved 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 senior notes or the capital equipment loan if and when they come due.

The following summarizes CIPHERGEN's contractual obligations at December 31, 2004, 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:					
Capital lease obligations(1)	\$ 44	\$ 16	\$ 22	\$ 6	\$ —
Equipment and insurance financing(1)	1,302	925	377	—	—
Convertible senior notes(2)	30,000	—	—	30,000	—
Interest payable on convertible senior notes	5,400	1,350	2,700	1,350	—
Non-cancelable portion of collaboration obligation(3)	228	228	—	—	—
Non-cancelable operating lease obligations	14,953	4,371	7,704	2,774	104
Purchase obligations(4)	683	683	—	—	—
Total contractual cash obligations	<u>\$ 52,610</u>	<u>\$ 7,573</u>	<u>\$ 10,803</u>	<u>\$ 34,130</u>	<u>\$ 104</u>

(1) Principal amounts, not including interest

(2) Excludes the beneficial conversion feature amounting to \$2,677, less related amortization of \$728. (See Note 10 of the Notes to Consolidated Financial Statements.)

(3) We have made a commitment to fund a Biomarker Discovery Center laboratory at The Johns Hopkins University School of Medicine which totals \$914,000 for the period December 2004 to November 2005, of which \$228,000 was non-cancelable at December 31, 2004.

(4) Purchase obligations include agreements to purchase inventory and other goods and services 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 requirements set forth in its credit agreements.

## 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 our consolidated financial condition, results of operations and cash flows.

## FACTORS THAT MAY AFFECT OUR RESULTS

**We expect to continue to incur net losses in 2005 and 2006. 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, 2004, we have generated cumulative revenue from continuing operations of approximately \$147.9 million and have incurred net losses of approximately \$160.4 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, \$36.7 million in 2003,

and \$19.8 million in 2004. 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 gross profit which, to date, has been generated principally from product sales. We expect to incur additional operating losses and these losses may be substantial. 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 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.

**If we fail to successfully expand sales of our ProteinChip Systems, including the successful commercialization of the Series 4000, and develop new versions of proteomic systems 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 and Arrays, and develop new, higher performance, easier to use versions of proteomic systems. In particular, our success will depend on our success in marketing our next generation ProteinChip System, the Series 4000. If this new system does not perform in accordance with market expectations, it is unlikely that we will be able to expand our sales. 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 may experience increased manufacturing costs or failure rates for our ProteinChip Systems and Arrays that are higher than we anticipated, particularly for newer products being introduced, such as the ProteinChip System, Series 4000.**

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. We may not be able to cost effectively manufacture such new products. In addition, it is difficult to predict the failure rate of new products, such as the ProteinChip System, Series 4000. If our manufacturing costs are higher than anticipated or if the failure rates for our products are higher than anticipated, resulting in increased warranty claims and increased costs associated with servicing those claims, our gross profit will decrease.

**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 risk in developing diagnostic products based on our biomarker discovery efforts; potential tests may fail to validate results 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 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 potential diagnostic 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.**

One element of our business strategy is to operate Biomarker Discovery Center laboratories in part through partnerships with academic and government research centers as well as 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.

**New product introductions, in particular the ProteinChip System, Series 4000, 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, including our ProteinChip System, Series 4000. 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. In addition, the introduction of new products makes the continuing sales of previous product versions difficult and may require significant price discounts on such 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 related product offerings 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. In addition, we have recently reduced our research and development headcount and expenditures, which may adversely affect our ability to further develop our technology.

**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.

**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 quarterly revenue and profitability. 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, administration 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.

**We will 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 and the proceeds from the sale of our BioSeptra business will be sufficient to meet our anticipated financial needs at least through the next twelve months. However, we may need to raise additional capital sooner, and we believe we will need to raise additional capital at some point in the future in order to develop new or enhanced products or services, increase our Biomarker Discovery Center laboratory activities undertaken for our Diagnostics Division, 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.

**Legislative actions resulting in higher compliance costs are likely to adversely impact our future financial position and results of operations.**

Compliance with changing regulation of corporate governance and public disclosure will result in additional expenses. Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and Nasdaq National Market listing requirements, are resulting in increased compliance costs. Specifically, we are undertaking significant efforts and numerous significant expenses to comply with Section 404 of the Sarbanes-Oxley Act of 2002. Compliance with these evolving standards will result in increased general and administrative

expenses and may cause a diversion of management time and attention from revenue-generating activities to compliance activities.

**Future changes in financial accounting standards or practices may cause adverse unexpected fluctuations and affect our reported results of operations.**

Future changes in financial accounting standards, including those currently proposed, will likely affect our reported results of operations. For example, the mandated change effective for us on July 1, 2005 requiring that we record compensation expense in the statement of operations for employee stock options using the fair value method or changes in existing taxation rules related to stock options will have a negative effect on our reported results. The FASB has proposed a choice of valuation models to estimate the fair value of employee stock options. These models, including the Black-Scholes option-pricing model, use varying methods and inputs and may yield significantly different results. If another party asserts that the fair values of our employee stock options are misstated, securities class action litigation could be brought against us and/or the market price of our common stock could decline.

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

We are highly dependent on our executive officers, senior scientists, engineers and sales people. In certain countries, a few key individuals are important to our local success. 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 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. During 2004 and early 2005, we took steps to reduce our headcount and our voluntary employee turnover has increased from historic levels. In addition, the FASB has announced changes to generally accepted accounting principles in the U.S., specifically Statement of Financial Accounting Standards No. 123 (Revised), "Share-Based Payment", that may cause us to change the manner in which we compensate our employees, which could considerably impact our ability to recruit and retain qualified employees.

**If we are unable to successfully expand our limited manufacturing capacity for ProteinChip readers and arrays, 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. 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 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, competitive protein research tools and services are



currently provided by a number of companies, including several which are larger than CIPHERGEN. In 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 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. In 2002, 2003 and 2004, all of our revenue from continuing operations was derived from SELDI-based products within the scope of the Baylor SELDI patents. 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 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 there under, 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 we fail to maintain our rights to utilize intellectual property directed to diagnostic biomarkers, we may not be able to offer diagnostic tests using those biomarkers.**

Our Diagnostics Division is developing diagnostic tests based on certain biomarkers which we have the right to utilize through licenses with our academic collaborators, such as The Johns Hopkins School of Medicine and Eastern Virginia Medical School. In some cases, our collaborators own the entire right to the biomarkers. In other cases we co-own the biomarkers with our collaborator. If, for some reason, we lose our license to biomarkers owned entirely by our collaborators, we may not be able to use these biomarkers in diagnostic tests. If we lose our exclusive license to biomarkers co-owned by us and our collaborators, our collaborators may license their share of the intellectual property to a third party that may compete with us in offering the diagnostic test.

**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 being issued.

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, 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 as well as processing services for our ProteinChip Arrays, and if we are unable to obtain these components and processing services, 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 and processing services for our ProteinChip Arrays. 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 Food and Drug Administration (“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 may be implemented in the future that may 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. Although we have certain business continuity plans in place, we have not established a formal comprehensive 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. In certain countries, a few key individuals are important to our local success. In particular, we have operations in China. Given the distance from our headquarters in California and the cultural, language, and time zone differences, we have been heavily dependent on a single general manager and a small number of other local employees in China to manage such operations. We have recently experienced significant turnover and job-related issues with such employees, including the recent departure of our general manager. While we are in the process of recruiting new senior management and employees in China, it will be difficult for us to replace such employees in a timely fashion and our operations in China will be adversely affected. In addition, China does not currently have a comprehensive and highly developed legal system, particularly with respect to the protection of intellectual property rights. As a result, enforcement of existing and future laws and contracts is uncertain, and the implementation and interpretation of such laws may be inconsistent. Such inconsistency could lead to piracy and degradation of our intellectual property protection.

**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 our ownership of 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.

**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 BioSeptra process chromatography business from Invitrogen Corporation, which we subsequently sold in November 2004. 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%, and in March 2004, we further increased our ownership to 100%. 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 are effectively subordinated to any secured debt to the extent of the value of the assets that secure the indebtedness. The notes also are “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<sup>sm</sup> 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, 2004 and 2005, 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, 2004, we had:

- 29,473,083 shares of common stock outstanding;
- 5,025,344 shares of common stock reserved for issuance upon exercise of options outstanding under our stock option plans with a weighted average exercise price of \$6.04 per share;
- in addition to the shares reserved for issuance upon the exercise of options referred to in the preceding bullet point, 1,041,868 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 have classified our marketable securities as available-for-sale, and have, accordingly, recorded such securities 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**

As of December 31, 2004, our only investment was a fixed rate annuity with a fair value of \$2.2 million due to mature on February 28, 2005, with an option to renew for one year at an estimated interest rate of 3.0% per annum. With the exception of the investment in this annuity, we believe that, in the near-term, we will maintain our available funds in short-term, highly liquid securities with original maturities of 90 days or less, and money market accounts.

The primary objective of our investment activities is to preserve principal, maintain proper liquidity to meet operating needs and maximize yields. Our investment policy, which has been approved by our Board of Directors, specifies credit quality standards for our investments and limits the amount of credit exposure to any single issue, issuer or type of investment. We may maintain our portfolio of cash equivalents, short-term investments and long-term investments in a variety of securities, including commercial paper, money market funds, and government and non-government debt securities, subject to our investment policy.

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, 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 BioSeptra S.A. and CIPHERGEN Biosystems KK are the euro and yen, respectively. Accordingly, the accounts of these operations were 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 \$7.5 million at December 31, 2004.

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 and 2004, 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 largely offset the effect of exchange rate changes on the intercompany loan. As of December 31, 2004, there were no forward contracts outstanding. Net realized foreign currency gains and losses related to foreign currency forward contracts were not material for the year ended December 31, 2004. 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

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## **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We have completed an integrated audit of CIPHERGEN Biosystems, Inc.'s 2004 consolidated financial statements and of its internal control over financial reporting as of December 31, 2004 and audits of its 2003 and 2002 consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Our opinions, based on our audits, are presented below.

### **Consolidated financial statements and financial statement schedule**

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a) (1), present fairly, in all material respects, the financial position of CIPHERGEN Biosystems, Inc. and its subsidiaries at December 31, 2004 and 2003, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a) (2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements 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.

### **Internal control over financial reporting**

Also, in our opinion, management's assessment, included in "Management's Report on Internal Control Over Financial Reporting" appearing under Item 9A, that the Company maintained effective internal control over financial reporting as of December 31, 2004 based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), is fairly stated, in all material respects, based on those criteria. Furthermore, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control—Integrated Framework issued by the COSO. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express opinions on management's assessment and on the effectiveness of the Company's internal control over financial reporting based on our audit. We conducted our audit of internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. An audit of internal control over financial reporting includes obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we consider necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance

of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ **PricewaterhouseCoopers LLP**

San Jose, California  
March 21, 2005

**CIPHERGEN BIOSYSTEMS, INC.**  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands, except share and per share data)

	<u>December 31,</u>	
	<u>2004</u>	<u>2003</u>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 35,392	\$ 32,853
Short-term investments	2,175	14,463
Accounts receivable, net of allowance for doubtful accounts of \$247 and \$553, respectively	10,811	14,731
Notes receivable from related parties	126	56
Prepaid expenses and other current assets	1,847	2,878
Inventories	6,919	8,300
Total current assets	<u>57,270</u>	<u>73,281</u>
Property, plant and equipment, net	9,315	15,891
Goodwill	2,529	2,870
Other intangible assets, net	3,040	7,009
Notes receivable from related parties	—	216
Other long-term assets	2,223	2,759
Total assets	<u>\$ 74,377</u>	<u>\$ 102,026</u>
<b>LIABILITIES, MINORITY INTEREST AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 3,369	\$ 5,062
Accrued liabilities	7,499	9,495
Deferred revenue	5,529	5,768
Current portion of capital lease obligations	16	324
Current portion of long-term debt	925	662
Total current liabilities	<u>17,338</u>	<u>21,311</u>
Deferred revenue	855	594
Capital lease obligations, net of current portion	28	2,274
Long-term debt, net of current portion	377	1,090
Convertible senior notes, net of discount	28,051	27,515
Other long term liabilities	1,013	1,185
Total liabilities	<u>47,662</u>	<u>53,969</u>
Commitments and contingencies (Note 12)		
Minority interest	<u>—</u>	<u>165</u>
Stockholders' equity:		
Common stock, \$0.001 par value		
Authorized: 80,000,000 shares at December 31, 2004 and 2003		
Issued and outstanding: 29,473,083 shares and 29,079,593 shares at December 31, 2004 and 2003, respectively	29	29
Additional paid-in capital	187,133	186,043
Notes receivable from stockholders	(349)	(1,093)
Deferred stock-based compensation	—	(725)
Accumulated other comprehensive income	263	4,158
Accumulated deficit	(160,361)	(140,520)
Total stockholders' equity	<u>26,715</u>	<u>47,892</u>
Total liabilities, minority interest and stockholders' equity	<u>\$ 74,377</u>	<u>\$ 102,026</u>

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,		
	2004	2003	2002
Revenue:			
Products	\$ 31,378	\$ 35,872	\$ 23,572
Products revenue from related parties	—	—	827
Services	8,803	7,766	4,809
Total revenue	40,181	43,638	29,208
Cost of revenue:			
Products	11,199	11,911	6,761
Products revenue from related parties	—	—	334
Services	3,876	3,426	2,277
Litigation settlement	—	7,257	—
Total cost of revenue	15,075	22,594	9,372
Gross profit	25,106	21,044	19,836
Operating expenses:			
Research and development	19,268	23,628	19,593
Sales and marketing	26,376	21,335	17,960
General and administrative	14,136	14,815	14,422
Total operating expenses	59,780	59,778	51,975
Loss from operations	(34,674 )	(38,734 )	(32,139 )
Interest income	505	702	1,543
Interest expense	(2,001 )	(763 )	(43 )
Other income (expense), net	(649 )	(150 )	(65 )
Loss from continuing operations before income taxes	(36,819 )	(38,945 )	(30,704 )
Income tax provision (benefit) from continuing operations	109	(47 )	(44 )
Net loss from continuing operations	(36,928 )	(38,898 )	(30,660 )
Discontinued operations:			
Income (loss) from discontinued operations, net of tax	(1,440 )	2,151	1,588
Gain from sale of discontinued operations, net of tax	18,527	—	—
Net income from discontinued operations	17,087	2,151	1,588
Net loss	\$ (19,841)	\$ (36,747)	\$ (29,072)
Net income (loss) per share, basic and diluted:			
Net loss per share from continuing operations	\$ (1.26)	\$ (1.38)	\$ (1.14)
Net income per share from discontinued operations	0.58	0.07	0.06
Net loss per share	\$ (0.68)	\$ (1.31)	\$ (1.08)
Shares used in computing net income (loss) per share	29,244	28,154	26,965

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,		
	2004	2003	2002
Cash flows from operating activities:			
Net loss	\$ (19,841 )	\$ (36,747 )	\$ (29,072 )
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	6,896	6,130	4,221
Change in minority interest	—	133	32
Stock issued for services	—	—	131
Stock-based compensation expense	602	1,418	2,072
Amortization of debt discount	536	192	—
Amortization of debt issuance costs	373	125	—
Non-cash portion of litigation settlement	—	4,257	—
Loss on retirement of fixed assets	208	114	33
Provision for bad debts	214	484	443
Losses on write-down of inventory	1,843	691	254
Interest accrued on notes receivable from related parties	(66 )	(84 )	(95 )
Gain from sale of BioSeptra business	(18,527 )	—	—
Changes in operating assets and liabilities, net of assets acquired or sold and liabilities assumed or relieved in business combinations:			
Accounts receivable	2,267	(1,203 )	(6,718 )
Accounts receivable from related parties	—	—	128
Inventories	(4,949 )	(929 )	(2,222 )
Prepaid expenses and other current assets	572	105	(402 )
Other long-term assets	(10 )	(246 )	282
Accounts payable and accrued liabilities	(2,827 )	3,027	2,371
Accounts payable to related party	—	(184 )	37
Deferred revenue	4	2,140	1,249
Deferred revenue from related parties	—	—	(319 )
Other long-term liabilities	247	(69 )	311
Net cash used in operating activities	<u>(32,458 )</u>	<u>(20,646 )</u>	<u>(27,264 )</u>
Cash flows from investing activities:			
Purchase of property, plant and equipment	(4,568 )	(6,350 )	(4,364 )
Proceeds from capital lease financing to reimburse previous cash outlays to purchase facility improvements	601	—	—
Purchase of marketable securities	—	(10,639 )	(10,068 )
Maturities of marketable securities	11,261	13,224	21,017
Marketable securities sold prior to maturity	850	—	—
Repayment of notes receivable from related party	—	230	—
Cash paid for license related to litigation settlement	(1,038 )	(613 )	—
Net cash acquired upon purchase of CIPHERGEN Biosystems KK common stock	—	—	872
Increase to goodwill from BioSeptra acquisition due to income tax settlement	(203 )	—	—
Purchase of CIPHERGEN Biosystems KK common stock	(1,000 )	—	—
Proceeds from sale of BioSeptra business, net	<u>28,055</u>	<u>—</u>	<u>—</u>
Net cash provided by (used in) investing activities	<u>33,958</u>	<u>(4,148 )</u>	<u>7,457</u>
Cash flows from financing activities:			
Repurchases of common stock	(3 )	—	(6 )
Proceeds from exercises of stock options and warrants	329	717	133
Proceeds from issuance of common stock under employee stock purchase plan	887	836	573
Repayment of stockholder notes	744	196	5
Principal payments on capital lease obligations	(376 )	(684 )	(447 )
Proceeds from long-term debt	—	32,066	—
Issuance costs of convertible senior notes	—	(1,866 )	—
Repayments of long-term debt	(789 )	(313 )	(117 )
Repayments of working capital loans for CIPHERGEN Biosystems KK to Sumitomo	—	—	(3,960 )
Net cash provided by (used in) financing activities	<u>792</u>	<u>30,952</u>	<u>(3,819 )</u>
Effect of exchange rate changes	<u>247</u>	<u>1,550</u>	<u>452</u>
Net increase (decrease) in cash and cash equivalents	<u>2,539</u>	<u>7,708</u>	<u>(23,174 )</u>
Cash and cash equivalents, beginning of year	<u>32,853</u>	<u>25,145</u>	<u>48,319</u>
Cash and cash equivalents, end of year	<u>\$ 35,392</u>	<u>\$ 32,853</u>	<u>\$ 25,145</u>
Supplemental cash flow information:			
Cash paid for interest	\$ 1,593	\$ 173	\$ 147
Cash paid for income taxes	2,135	62	21
Supplemental schedule of non-cash investing and financing activities:			
Acquisition of property and equipment under capital leases	21	21	5
Transfer of fixed assets to inventory	446	618	244

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

**CIPHERGEN BIOSYSTEMS, INC.**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
(in thousands)

			Additional	Notes	Deferred	Accumulated	Accumulated	
	Shares	Amount	Paid-In	Receivable	Stock-Based	Other	Deficit	Total
			Capital	From	Compensation	Comprehensive		
				Stockholders		Income (Loss)		
Balances, January 1, 2002	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								(34,069)
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
Comprehensive loss:								
Net loss	—	—	—	—	—	—	(19,841)	(19,841)
Change in unrealized loss on marketable securities	—	—	—	—	—	7	—	7
Foreign currency translation adjustment	—	—	—	—	—	829	—	829
Foreign currency translation gain realized upon sale of BioSepra	—	—	—	—	—	(4,731)	—	(4,731)
Total comprehensive loss								(23,736)
Stock options exercised	88	—	329	—	—	—	—	329
Purchase of common stock under employee stock purchase plan	306	—	887	—	—	—	—	887
Repurchase of common stock	(1)	—	(3)	—	—	—	—	(3)
Deferred stock-based compensation	—	—	(123)	—	123	—	—	—
Amortization of deferred stock-based compensation	—	—	—	—	602	—	—	602
Repayment of notes receivable from stockholders	—	—	—	744	—	—	—	744
Balances, December 31, 2004	29,473	\$ 29	\$ 187,133	\$ (349)	\$ —	\$ 263	\$ (160,361)	\$ 26,715

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.

**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. Certain financial statement items have been reclassified to conform to the current year’s format. These reclassifications had no impact on previously reported results of operations.

BioSeptra S.A. was a wholly-owned subsidiary and was consolidated through November 30, 2004, at which time the Company sold BioSeptra S.A., along with other assets related to its process chromatography business. All comparative periods shown in the statements of operations have been restated to reflect the BioSeptra business as a discontinued operation.

The Company has incurred significant net losses and negative cash flows from operations since inception. At December 31, 2004, the Company had an accumulated deficit of \$160.4 million. Management believes that currently available resources will provide sufficient funds to enable the Company to meet its obligations at least through the next twelve months. If anticipated operating results are not achieved, however, management believes that planned expenditures may need to be reduced, extending the time period over which the currently available resources will be adequate to fund the Company’s operations. At such time as the Company requires additional funding, the Company will seek to raise such additional funding from various possible sources, including the public equity market, private financings, sales of assets, collaborative arrangements and debt. If additional capital is raised through the issuance of equity securities convertible into equity, stockholders will experience dilution, and such securities may have rights, preferences or privileges senior to those of the holders of common stock. There can be no assurance that the Company will be able to obtain such financing, or obtain it on acceptable terms.

**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. At December 31, 2004, the Company classified all marketable 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 carrying value of the Company's investment in a fixed rate annuity, which is not within the scope of SFAS 115, "Accounting for Certain Investments in Debt and Equity Securities," approximates fair value due to its short maturity.

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, 2004 were as follows (in thousands):

	<u>Book Value</u>	<u>Fair Value</u>
Equipment financing loan	\$ 1,090	\$ 1,090
Convertible senior notes	28,051	21,525
	<u>\$ 29,141</u>	<u>\$ 22,615</u>

### **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, 2004 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 2004 or 2003.

### **Inventories**

Inventories are stated at the lower of standard cost, which approximates cost on a first-in, first-out basis, or market value. Cost includes direct materials, direct labor, contracted manufacturing services and manufacturing overhead. Reserves for potentially excess and obsolete inventory are recorded based on management's analysis of inventory levels, planned changes in product offerings, sales forecasts and other factors.

### **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, 3-5 years; computer equipment and software, 3 years; furniture and fixtures, 5 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 and CIPHERGEN Biosystems KK in 2002 and 2004. 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 represent a technology license acquired in connection with the settlement of litigation in 2003 which is stated at cost and is being amortized on a straight-line basis over its estimated useful life of 17 years. Other intangible assets 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 is reasonably assured. 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.

Revenue from sales of separately priced software products is recognized 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 deemed probable.

The Company generally includes a standard 12-month warranty on its instruments and accessories in the form of a maintenance contract upon initial sale. The Company also sells separately priced maintenance (extended warranty) contracts, which are generally for 12 or 24 months, upon expiration of the initial warranty. No distinction is made between a standard warranty and a maintenance (extended warranty) contract. Coverage under both the standard and extended warranty maintenance contracts is identical. Because CIPHERGEN does not offer traditional warranties but enhances them such that they are identical to separately priced maintenance contracts, they are accounted for in the same way. 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. 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.

For revenue from Biomarker Discovery Center contracts and other consulting contracts, if elements are specifically tied to a separate earnings process, then revenue related to an element is recognized when the specific performance obligation associated with that element is completed. When revenues for an element are not specifically tied to a separate earnings process, they are recognized ratably over the term of the agreement. Revenue from Biomarker Discovery Center services and other consulting contracts is recognized at the completion of key stages in the performance of the service as described in CIPHERGEN's agreement with the customer. Often there is only a single element, namely delivery of a scientific report

upon completion of Ciphergen's analysis of customer samples, in which case the Company recognizes all the revenue upon the conclusion of the project when all deliverables have been provided to the customer. Revenue is deferred for fees received before earned. Ciphergen's training is billed based on published course fees and the Company generally recognizes revenue as the training is provided to the customer.

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 \$665,000 in 2004, \$279,000 in 2003, and \$354,000 in 2002.

### **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,		
	2004	2003	2002
Net loss as reported	\$ (19,841)	\$ (36,747)	\$ (29,072)
Add: Employee stock-based compensation expense in reported net income, net of tax	621	1,368	2,148
Less: Employee stock-based compensation expense determined under the fair value method, net of tax	(6,369)	(4,782)	(4,927)
Pro forma net loss	<u>\$ (25,589)</u>	<u>\$ (40,161)</u>	<u>\$ (31,851)</u>
Basic and diluted net loss per share:			
As reported	\$ (0.68)	\$ (1.31)	\$ (1.08)
Pro forma	\$ (0.88)	\$ (1.43)	\$ (1.18)

The value of each option grant was estimated on the date of grant using the Black-Scholes option-pricing model in 2004, 2003 and 2002 with the following weighted assumptions:

	Stock Option Plan			Employee Stock Purchase Plan		
	2004	2003	2002	2004	2003	2002
Assumptions:						
Risk-free interest rate	3.2 %	2.7 %	4.1 %	1.9 %	1.1 %	1.3 %
Expected life	5 years	5 years	5 years	0.5 year	0.5 year	0.5 year
Expected volatility	93 %	69 %	60 %	93 %	69 %	60 %
Expected dividend yield	—	—	—	—	—	—
Weighted average fair values:						
Exercise price less than market price	\$ —	\$ —	\$ —	\$ 1.43	\$ 1.13	\$ 1.11
Exercise price equal to market price	5.56	3.61	2.53	—	—	—
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 currency of CIPHERGEN Biosystems KK is the Japanese yen. Accordingly, all balance sheet accounts of this operation are translated into U.S. dollars using the current exchange rate in effect at the balance sheet date. The revenues and expenses of CIPHERGEN Biosystems KK are translated using the average exchange rates in effect during the period, and the gains and losses from foreign currency

translation are recorded directly into a separate component of stockholders' equity under the caption "Accumulated other comprehensive income."

The functional currency of BioSeptra S.A. was the euro. Upon the completion of the sale of BioSeptra on November 30, 2004, the cumulative translation adjustment relating to BioSeptra was included in the determination of the gain on the sale.

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 October 2004, the American Jobs Creation Act of 2004 ("Jobs Act") was signed into law by the President of the United States. The Jobs Act contains numerous corporate tax changes, including eliminating a tax benefit relating to U.S. product exports, a lower U.S. tax rate on non-U.S. dividends and a new deduction relating to U.S. manufacturing. The Company is in the process of evaluating this legislation. However, the Jobs Act is not anticipated to materially affect the Company's consolidated financial position, results of operations or cash flows.

In November 2004, the Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 151, "Inventory Costs, an amendment of ARB 43, Chapter 4". SFAS No. 151 requires certain inventory costs to be recognized as current period expenses. This standard also provides guidance for the allocation of fixed production overhead costs. This standard is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The Company will adopt this standard in fiscal 2006. The Company has not yet determined the impact, if any, this standard will have on the financial statements of the Company.

In December 2004, the FASB issued SFAS No. 123 (Revised), "Share-Based Payment." This standard revises SFAS No. 123, APB 25 and related accounting interpretations, and eliminates the use of the intrinsic value method. As noted previously, the Company currently uses the intrinsic value method of APB 25 to value stock options, and accordingly, no compensation expense has been recognized for stock options. This standard requires the expensing of all stock-based compensation, including stock options, using the fair value method. For the Company, the effective date of this standard will be July 1, 2005. The Company has not yet determined the impact this standard will have on its financial statements.

In December 2004, the FASB issued SFAS No. 153, "Exchanges of Nonmonetary Assets—An Amendment of APB Opinion No. 29, Accounting for Nonmonetary Transactions". SFAS 153 eliminates the exception from fair value measurement for nonmonetary exchanges of similar productive assets in paragraph 21(b) of APB Opinion No. 29, "Accounting for Nonmonetary Transactions," and replaces it with an exception for exchanges that do not have commercial substance. SFAS 153 specifies that a nonmonetary exchange has commercial substance if the future cash flows of the entity are expected to change significantly as a result of the exchange. SFAS 153 is effective for fiscal periods beginning after June 15, 2005 and is required to be adopted by CIPHERGEN in the third quarter of 2005. The Company is currently evaluating the effect that the adoption of SFAS 153 will have on its consolidated financial position, results of operations and cash flows, but does not expect it to have a material impact.

## 2. Marketable Securities and Other Investments

The Company had no marketable securities at December 31, 2004. Marketable securities, which were classified as available-for-sale, are summarized as follows as of December 31, 2003 (in thousands):

	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	—	—	—
	<u>\$12,358</u>	<u>\$(7)</u>	<u>\$12,351</u>

During 2004, the Company sold certain securities prior to their maturity date to meet operating needs. The total amortized cost of the securities sold prior to maturity during the year was not material. The loss on these sales was also not material. During 2003, no marketable securities were sold prior to maturity.

At December 31, 2004 and 2003, the Company had an investment in a fixed rate annuity with a fair value of approximately \$2.2 million and \$2.1 million, respectively. On February 28, 2005, the Company exercised its option to renew the annuity for one year at an estimated interest rate of 3.0% per annum.

## 3. Inventories (in thousands)

	December 31,	
	2004	2003
Raw materials	\$2,822	\$2,791
Work in progress	1,400	1,320
Finished goods	2,697	4,189
	<u>\$6,919</u>	<u>\$8,300</u>

Inventory at December 31, 2003 included approximately \$3,210 of process chromatography sorbents. On November 30, 2004, all process chromatography sorbent inventory was sold as part of the sale of the BioSeptra business.

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

	2004	2003
Land	\$ —	\$ 499
Buildings and improvements	—	3,646
Machinery and equipment	14,557	16,901
Leasehold improvements	3,616	4,388
Computers and equipment	1,992	2,291
Furniture and fixtures	896	1,053
Construction in progress	298	767
	<u>21,359</u>	<u>29,545</u>
Less: Accumulated depreciation and amortization	<u>(12,044)</u>	<u>(13,654)</u>
	<u>\$ 9,315</u>	<u>\$ 15,891</u>

Property, plant and equipment included \$4,145 of land, buildings and improvements under capital leases at December 31, 2003. Property, plant and equipment also included \$184 and \$234 of machinery and equipment under capital leases at December 31, 2004 and 2003, respectively. Accumulated amortization of assets under capital leases totaled \$143 and \$1,037 at December 31, 2004 and 2003, respectively.



Construction in progress at December 31, 2004 and 2003 represents manufacturing equipment being built and installed at the Company's Fremont, California facility to automate certain processes in the production of ProteinChip Arrays. The majority of the automated manufacturing equipment went into service in 2004, and the remainder is expected to be fully operational in early 2005.

Depreciation expense for property, plant and equipment was \$4,741 in 2004, \$4,112 in 2003 and \$3,076 in 2002.

Approximately \$6,081 of net property, plant and equipment was included in the sale of the BioSeptra business on November 30, 2004.

## 5. Purchase of Additional Ownership Interest in CIPHERGEN BIOSYSTEMS KK

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%. On March 23, 2004, the Company acquired the remaining 30% equity stake in CIPHERGEN BIOSYSTEMS KK, bringing its total ownership to 100%, in order to facilitate further expansion of the Company's activities in Japan. The Company paid \$1.0 million in cash to SC BIOSCIENCES (a unit of Sumitomo Corporation) for the final 30% of the shares of CIPHERGEN BIOSYSTEMS KK common stock. Acquisition costs were immaterial. The acquisition was accounted for using the purchase method of accounting.

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	\$ 1,804
Inventories	218
Property and equipment	281
Other tangible assets	101
Accounts payable and accrued liabilities, including working capital loans	(2,221)
Capital lease obligations	(18)
	165
Excess of purchase price over net assets acquired	835
	<u>\$ 1,000</u>

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 frequently if circumstances warrant.

## 6. Sale of BioSeptra Business

On November 30, 2004, CIPHERGEN completed the sale to Pall Corporation of its wholly-owned French subsidiary, BioSeptra S.A., along with selected other assets (together “the BioSeptra business”). The sale of the BioSeptra business generated net proceeds of approximately \$27.0 million. An additional \$1.0 million is being held in an interest-bearing escrow account for one year, upon which claims for selling price adjustments may be made by the buyer. The Company recognized an \$18.5 million gain on this sale, summarized as follows (in thousands):

Net proceeds:	
Cash proceeds received	\$28,376
Less: Post-closing adjustment owed to buyer	(1,044)
Less: Transaction costs	(321)
	<u>27,011</u>
Cost basis:	
Accounts receivable, net, and other current assets	2,795
Inventories	5,294
Property, plant and equipment, net	6,081
Other tangible assets	210
Patents	210
Developed product technology	2,828
Goodwill	1,380
Accounts payable and accrued liabilities	(1,976)
Capital lease obligations	(2,978)
Other long-term liabilities	(629)
Cumulative translation adjustment	(4,731)
	<u>8,484</u>
Gain on sale of BioSeptra business	<u>\$18,527</u>

As a result, CIPHERGEN reported the BioSeptra business as a discontinued operation beginning in the fourth quarter of 2004 and restated all prior periods presented in the statements of operations on a comparative basis.

The operating results of the BioSeptra business are presented in the following table (in thousands):

	<b>Eleven Months Ended November 30,</b>	<b>Years Ended December 31,</b>	
	<b>2004</b>	<b>2003</b>	<b>2002</b>
Revenue	8,395	14,734	10,092
Gross profit	4,921	9,483	6,706
Operating expenses	6,281	6,629	4,937
Operating income (loss)	(1,360)	2,854	1,769
Income (loss) before income taxes	(1,377)	3,605	1,693
Income tax provision	63	1,454	105
Income (loss) from discontinued operations, net of tax	(1,440)	2,151	1,588

## 7. 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, 2003 and 2004, and determined that no impairment had occurred. Goodwill and other intangible assets consisted of the following (in thousands):

	December 31, 2004			December 31, 2003		
	Gross Carrying	Accumulated	Total	Gross Carrying	Accumulated	Total
	Amount	Amortization		Amount	Amortization	
Non-amortizing:						
Goodwill	\$ 2,529	\$ —	\$ 2,529	\$ 2,870	\$ —	\$ 2,870
Amortizing:						
Acquired completed technology	—	—	—	5,400	1,865	3,535
Patents	—	—	—	400	138	262
Acquired license related to litigation settlement	5,156	2,116	3,040	4,118	906	3,212
	<u>\$ 7,685</u>	<u>\$ 2,116</u>	<u>\$ 5,569</u>	<u>\$ 12,788</u>	<u>\$ 2,909</u>	<u>\$ 9,879</u>

Additions to goodwill and other intangible assets consisted of \$835,000 of goodwill recorded upon the acquisition of the remaining 30% equity stake in Ciphergen Biosystems KK, \$203,000 added to goodwill for a tax settlement in 2004 related to the acquisition of BioSeptra in 2001, and approximately \$1.0 million paid in license fees related to a litigation settlement. Deletions consisted of approximately \$1.4 million of goodwill written-off against the gain on the sale of the BioSeptra business. Amortization expense for these intangible assets was (in thousands):

	2004	2003	2002
Acquired completed technology	\$ 707	\$ 772	\$ 772
Patents	53	57	57
Acquired license related to litigation settlement	1,210	906	—
	<u>\$ 1,970</u>	<u>\$ 1,735</u>	<u>\$ 829</u>

Annual amortization expense for these intangible assets is expected to be approximately \$1,209,000 in 2005; \$1,209,000 in 2006; \$622,000 in 2007; and zero in subsequent years. Amortization expense for the acquired license related to the litigation settlement is charged to cost of revenue.

The acquired license is amortized to cost of revenue. It is related to the May 28, 2003 litigation settlement between Ciphergen and Molecular Analytical Systems, Inc. (“MAS”), LumiCyte, Inc. (“LumiCyte”), and T. William Hutchens whereby the Company acquired the undisputed exclusive rights granted to MAS under patents licensed from Baylor College of Medicine and the parties released all claims against each other. These patent rights refer to technology known as SELDI-TOF-MS, and provide the Company with an exclusive worldwide license and right to sublicense the technology and to commercialize any and all products, information and services derived from the technology without limitation.

Furthermore, LumiCyte assigned all rights granted to it from MAS and related to the Baylor College of Medicine patents to the Company without restriction. 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. Although \$10.0 million is the maximum amount that could be payable, management believes it is likely that in the remaining approximately nine years until May 2014, the Company will achieve cumulative sales sufficient to reach this upper limit. Through December 31, 2004, the Company had paid or accrued a total of \$1.7 million in such license fees.

The total cost of the litigation settlement, including future license fees, is expected to be \$20.8 million. Management cannot predict the amount of future revenue that will be earned over the remaining life of the technology. Therefore, the license fees are not recognized based on revenue. Rather, the license rights are treated as an intangible asset that the Company purchased, and are amortized over its 17-year useful life, from April 1997 to May 2014, using the straight line method. Of the total anticipated settlement costs of \$20.8 million, \$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, \$1.2 million was amortized to cost of revenue in 2004, and the remaining \$11.4 million will be amortized to cost of revenue in future periods through the second quarter of 2014. The cost is being prorated between cost of products revenue and cost of services revenue based on the ratio of SELDI-based products revenue to SELDI-based services revenue.

## 8. Accrued Liabilities (in thousands)

	December 31,	
	2004	2003
Payroll and related expenses	\$ 2,022	\$ 2,984
Compensated absences	1,331	1,738
Legal and accounting fees	1,045	1,025
Tax-related liabilities	374	2,344
Accrued interest on convertible senior notes	450	484
Post-closing adjustment owed to buyer of BioSeptra business	1,044	—
Other accrued liabilities	1,233	920
	<u>\$ 7,499</u>	<u>\$ 9,495</u>

## 9. 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. Ciphergen makes no distinction between a standard warranty and a maintenance (extended warranty) contract. The Company substitutes a maintenance contract in place of a standard 12-month warranty on its instruments and accessories upon initial sale. Ciphergen also sells separately priced maintenance (extended warranty) contracts, which are generally for 12 or 24 months, upon expiration of the initial warranty. Coverage under both the standard and extended warranty maintenance contracts is identical. Because the Company does not offer traditional warranties but enhances them such that they are identical to our separately priced maintenance contracts, management believes it is appropriate to account for them in the same way. Revenue for both the standard and extended warranty maintenance contracts is deferred and recognized on a straight line basis over the period of the applicable maintenance contract. Related costs are recognized as incurred.

Changes in product warranty obligations, including separately priced maintenance obligations, during the years ended December 31, 2004 and 2003 were as follows (in thousands):

	<u>2004</u>	<u>2003</u>
Balance at beginning of period	\$ 3,442	\$ 1,800
Add: Costs incurred for maintenance contracts	2,664	2,009
Revenue deferred for separately priced maintenance contracts	5,473	5,221
Less: Settlements made under maintenance contracts	(2,664)	(2,009)
Revenue recognized for separately priced maintenance contracts	<u>(5,137)</u>	<u>(3,579)</u>
Balance at end of period	<u>\$ 3,778</u>	<u>\$ 3,442</u>

## 10. Long-term Debt and Capital Leases

### 4.5% Convertible Senior Notes Due 2008

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 \$1.9 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 effective interest rate is 5.85% per annum. 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 2004 and 2003 amounted to \$536,000 and \$192,000, respectively.

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 107.5% of the principal balance upon a change in control of the Company prior to 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.

The notes and common stock issuable upon conversion of the notes were registered with the U.S. Securities and Exchange Commission on Form S-3 on October 8, 2003, and at December 31, 2004 all notes remained issued and outstanding.

### 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 June 30, 2004, the last day on which the Company could draw against this facility, 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, 2004, the balance outstanding on the loan, including interest charges, was approximately \$1.3 million, with the final payment scheduled for July 1, 2006.

### Capital Leases

The Company 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 July 31, 2009. The interest rates are fixed rates. The weighted average interest rate was 5.0% at December 31, 2004.

As of December 31, 2004, future minimum lease payments under capital lease agreements were as follows (in thousands):

2005	\$ 18
2006	12
2007	12
2008	5
2009	1
2010 and after	—
Total minimum lease payments	48
Less: amount representing interest	(4)
Present value of minimum lease payments	44
Less: Current portion	(16)
Non-current portion	<u>\$ 28</u>

## 11. Foreign Currency Contracts

During the year ended December 31, 2004, 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 largely offset the effect of exchange rate changes on the intercompany loan. As of December 31, 2004, there were no forward contracts outstanding. Net realized foreign currency gains and losses related to foreign currency forward contracts were recorded in other income (expense) in the Consolidated Statements of Operations and were not material for the year ended December 31, 2004.

## 12. 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 \$3,685,000, \$3,514,000, and \$2,828,000 in the years ended December 31, 2004, 2003 and 2002, 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 2004 and 2003, and \$475,000 in 2002.

As of December 31, 2004, future minimum payments under non-cancelable operating leases were as follows (in thousands):

2005	\$ 4,371
2006	3,904
2007	3,800
2008	2,358
2009 and after	520
	<u>\$ 14,953</u>

### Inventory Purchase Obligations

At December 31, 2004, the Company had non-cancelable agreements with certain vendors obligating CIPHERGEN to purchase approximately \$500,000 of inventory during 2005.

### 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 or 2004. The remaining 96,750 shares will be issued as common stock upon the achievement of additional milestones. The value of these shares will be recorded as research and development expense when the development milestones are achieved.

### Non-Cancelable Collaboration Obligation

The Company has entered into an agreement to fund a Biomarker Discovery Center collaboration with The Johns Hopkins University School of Medicine. Under this agreement, CIPHERGEN has an obligation to fund a total of \$914,000 for the period from December 2004 to November 2005, payable quarterly. The unfunded commitment is cancelable with 90 days notice.

### **13. Stockholders' Equity**

At December 31, 2004 and 2003, 5,000,000 shares of preferred stock were authorized, but no shares were issued or outstanding.

### **14. 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 and unexercised options generally expire ten years from the date of grant. At December 31, 2004, a total of 4,637 shares of common stock were subject to repurchase by the Company at a weighted average repurchase price of \$3.49 per share. Since the Company's initial public offering, no options have been granted under the 1993 Plan. During 2002, 2003 and 2004, options for 59,427, 84,731 and 30,923 shares were exercised, respectively. Options for 80,113, 24,319 and 47,672 shares were canceled during 2002, 2003 and 2004, 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, 2004, the Company had 791,828 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 and unexercised options generally expire ten years from the date of grant. 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. During 2004, options for 1,742,625 shares were granted, options for 53,900 shares were exercised, and options for 640,199 shares were canceled.

On January 1, 2003, 2004 and 2005 an additional 1,100,000, 1,400,000 and 900,000 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):

	Shares Available For Grant	Options Outstanding		Weighted Average Exercise Price
		Number of Shares	Price Per Share	Aggregate Price
Balances, January 1, 2002	336	2,300	\$ 0.23-8.50	\$ 10,670
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
Options canceled/shares repurchased	209	(206)	1.16-8.50	(961)
Options exercised	—	(62)	0.23-5.78	(133)
Balances, December 31, 2002	430	3,215	0.23-8.50	15,040
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
Options canceled/shares repurchased	211	(211)	1.16-6.74	(1,022)
Options exercised	—	(172)	0.35-8.50	(717)
Balances, December 31, 2003	494	4,054	0.23-11.96	21,408
Shares reserved for the 2000 Plan	1,400	—		
Reduction in shares reserved	(47)	—		
Options granted	(1,743)	1,743	3.29-9.99	13,376
Options canceled/shares repurchased	688	(687)	1.16-11.96	(4,088)
Options exercised	—	(85)	0.35-8.50	(329)
Balances, December 31, 2004	<u>792</u>	<u>5,025</u>	<u>\$ 0.23-11.96</u>	<u>\$ 30,367</u>

The options outstanding and currently exercisable by weighted average exercise price at December 31, 2004 were as follows:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number (in thousands)	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number (in thousands)	Weighted Average Exercise Price
\$ 0.23-3.43	294	6.7	\$ 2.61	183	\$ 2.20
\$ 3.49	829	5.3	\$ 3.49	829	\$ 3.49
\$ 3.63-4.35	707	8.8	\$ 4.06	166	\$ 4.26
\$ 4.43-4.53	611	7.6	\$ 4.51	301	\$ 4.51
\$ 4.86-6.08	513	7.0	\$ 5.74	325	\$ 5.73
\$ 6.38-8.50	544	7.4	\$ 7.57	330	\$ 7.64
\$ 8.51-8.64	688	9.2	\$ 8.58	94	\$ 8.58
\$ 9.01-9.60	679	8.7	\$ 9.44	293	\$ 9.52
\$9.75-11.29	114	9.0	\$ 10.14	22	\$ 10.21
\$ 11.96	46	8.7	\$ 11.96	12	\$ 11.96
\$0.23-11.96	<u>5,025</u>	<u>7.7</u>	<u>\$ 6.04</u>	<u>2,555</u>	<u>\$ 5.36</u>

### Stock-Based Compensation

During the years ended December 31, 2002, 2003 and 2004, 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, 2004, the Company recorded \$20.9 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 was 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,		
	2004	2003	2002
Cost of revenue	\$ 45	\$ 81	\$ 124
Research and development	37	187	(36)
Sales and marketing	93	274	398
General and administrative	427	876	1,586
Total stock-based compensation	<u>\$ 602</u>	<u>\$ 1,418</u>	<u>\$ 2,072</u>

## 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 and 2004, 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, 2004, the Company had 250,040 shares of common stock reserved for purchase by employees under this Plan. During 2002, 2003 and 2004, purchases of 175,519, 310,026 and 306,209 shares, respectively, were made under this Plan. There was no activity under this plan in 2000.

On January 1, 2003, 2004 and 2005 an additional 250,000, 290,795 and 180,000 shares, respectively, were reserved for purchase under the 2000 Employee Stock Purchase Plan. On June 3, 2004, the stockholders approved an additional 250,000 shares to be reserved for this Plan.

## 15. 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 Company has incurred income tax liabilities primarily in France and Japan, as well as in most of the other countries outside the U.S. in which it operates. The Company's provision for income taxes was due to current foreign income taxes, which were \$172,000, \$1.4 million and \$61,000 for the years ended December 31, 2004, 2003 and 2002, respectively, including discontinued operations. Excluding discontinued operations, current foreign income taxes were an expense of \$109,000, a benefit of \$47,000 and a benefit of \$44,000 for the years ended December 31, 2004, 2003 and 2002, 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, 2004.

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

	<u>December 31,</u>	
	<u>2004</u>	<u>2003</u>
Depreciation and amortization	\$ 1,051	\$ 1,219
Other	7,095	4,505
Research and development and other credits	6,685	5,500
Net operating losses	42,365	39,026
Deferred tax assets	57,196	50,250
Less: Valuation allowance	(57,196 )	(50,250 )
	<u>\$ —</u>	<u>\$ —</u>

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

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Tax at federal statutory rate	(34)%	(34)%	(34)%
State tax, net of federal benefit	(6)	(6)	(7)
Research and development credits	(4)	(5)	(3)
Change in valuation allowance	35	43	44
Stock-based compensation	1	2	2
Foreign tax rate difference and other	3	4	(2)
Gain on sale of BioSeptra	6	—	—
Provision for income taxes	<u>1%</u>	<u>4%</u>	<u>0%</u>

Pre-tax U.S. losses were \$21.4 million, \$39.8 million and \$31.3 million and pre-tax foreign income was \$1.8 million, 4.6 million and \$2.3 million in 2004, 2003 and 2002, respectively, including discontinued operations. Excluding discontinued operations, pre-tax U.S. losses were \$38.4 million, \$39.5 million and \$30.0 million and pre-tax foreign income or losses were income of \$1.8 million, income of \$641,000 and a loss of \$629,000 in 2004, 2003 and 2002, respectively.

As of December 31, 2004, the Company had net operating loss carryforwards of approximately \$122.2 million for federal and \$15.7 million for state tax purposes. If not utilized, these carryforwards will expire beginning in 2009 for federal purposes and 2005 for state purposes.

The Company had research credit carryforwards of approximately \$4.0 million and \$3.7 million for federal and state income tax purposes, respectively. If not utilized, the federal research credit carryforward will expire in various amounts beginning in 2011. 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.

The Company has used net operating loss carryforwards to reduce its income tax liabilities in France and Japan. It fully utilized its French net operating loss carryforwards in 2003, resulting in higher French income tax liability in 2003 when BioSeptra generated net income, although this was followed in 2004 by a net loss. The Company fully utilized its Japanese net operating loss carryforwards in 2004, resulting in higher 2004 Japanese income tax liability.

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.

## 16. Accumulated Other Comprehensive Income

Comprehensive income (loss) generally represents all changes in stockholders' equity except those resulting from investments or contributions by stockholders. The Company's unrealized gains (losses) on available-for-sale investments and cumulative translation adjustments represent the components of comprehensive income (loss) that are excluded from the net income (loss).

The components of accumulated other comprehensive income (loss), net of taxes, reflected in the consolidated statements of stockholders' equity (deficit) are as follows (in thousands):

	<u>December 31,</u>	
	<u>2004</u>	<u>2003</u>
Unrealized loss on marketable securities	\$ —	\$ (7)
Translation adjustments	263	4,165
	<u>\$ 263</u>	<u>\$ 4,158</u>

## 17. 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 shares that could be issued if all convertible senior notes were converted into common stock, 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 outstanding 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):

	<u>Years Ended December 31,</u>		
	<u>2004</u>	<u>2003</u>	<u>2002</u>
<b>Numerator:</b>			
Net loss from continuing operations	(36,928 )	(38,898 )	(30,660 )
Net income from discontinued operations	17,087	2,151	1,588
Net loss	<u>\$ (19,841)</u>	<u>\$ (36,747)</u>	<u>\$ (29,072)</u>
<b>Denominator:</b>			
Weighted average common shares outstanding	29,273	28,257	27,173
Weighted average unvested common shares subject to repurchase	(29)	(103)	(208)
Denominator for basic and diluted calculations	<u>29,244</u>	<u>28,154</u>	<u>26,965</u>
<b>Net income (loss) per share, basic and diluted:</b>			
Loss per share from continuing operations	\$ (1.26)	\$ (1.38)	\$ (1.14)
Income per share from discontinued operations	0.58	0.07	0.06
Net loss per share	<u>\$ (0.68)</u>	<u>\$ (1.31)</u>	<u>\$ (1.08)</u>

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,		
	2004	2003	2002
Common stock subject to repurchase	5	65	150
Stock options outstanding	5,025	4,054	3,215
Common stock issuable under employee stock purchase plan	65	85	62
Common stock warrants outstanding	—	—	9
Shares that could be issued if all convertible senior notes were converted into common stock	3,265	3,265	—
	<u>8,360</u>	<u>7,469</u>	<u>3,436</u>

## 18. 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, 2004.

## 19. Related Parties

The Company has two notes receivable from officers related to the early exercise of stock options. These full recourse notes have five-year terms 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. The following information is as of December 31, 2004.

Name	Position	Date of Loan	Interest Rate	Principal Amount	Accrued Interest
John Storella	Vice President, Intellectual Property Affairs	September 27, 2000	6.22%	\$ 49,089	\$ 14,423
William Rich(1)	President and Chief Executive Officer	March 8, 2000	6.80%	300,000	112,049

(1) On March 8, 2005, Dr. Rich paid off his note and accrued interest in full.

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 from Stanford Research Systems \$894,000 and \$548,000 of inventory in 2002 and 2003, respectively, during which time the supplier was deemed to be a related party by virtue of the fact that its President was a member of CIPHERGEN's Board of Directors. The Company also made non-cash payments in the form of 49,450 shares of CIPHERGEN common stock to this related party in 2002 under the terms of a joint development agreement. (See Note 12.) This director resigned from the Board on April 7, 2003, and in 2004 the vendor was no longer considered a related party.

## 20. 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, 2004, 2003 and 2002 (in thousands). Revenue from discontinued operations has been excluded.

	2004	2003	2002
ProteinChip Systems and related products	\$ 31,378	\$ 35,872	\$ 24,399
Services	8,803	7,766	4,809
	<u>\$ 40,181</u>	<u>\$ 43,638</u>	<u>\$ 29,208</u>

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. Revenue from discontinued operations has been excluded. 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 from continuing operations and long-lived assets for the years ended December 31, 2004, 2003 and 2002 (in thousands):

	2004	2003	2002
<b>Revenue</b>			
United States	\$ 17,636	\$ 20,036	\$ 17,526
Canada	950	2,249	1,460
Europe	9,387	10,696	5,078
Asia	12,208	10,657	5,144
Total	<u>\$ 40,181</u>	<u>\$ 43,638</u>	<u>\$ 29,208</u>
<b>Long-lived assets</b>			
United States	\$ 7,308	\$ 7,502	\$ 5,882
Canada	111	208	30
Europe	958	7,018	5,846
Asia	938	1,163	1,612
Total	<u>\$ 9,315</u>	<u>\$ 15,891</u>	<u>\$ 13,370</u>

In 2004 and in 2003, sales to customers in Japan exceeded 10% of total revenue from continuing operations. In 2002, no foreign nation accounted for 10% or more of revenue from continuing operations.

## 21. Quarterly Consolidated Financial Data (Unaudited)

The following table presents certain unaudited consolidated quarterly financial information for the eight quarters ended December 31, 2004. Revenue and gross profit for discontinued operations have been excluded in all periods shown as a result of the sale of our BioSeptra business. 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 7. 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.

	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>	<u>Fiscal Year</u>
	(in thousands, except per share data)				
Total revenue					
2004	\$ 13,252	\$ 8,336	\$ 8,495	\$ 10,098	\$ 40,181
2003	8,854	11,073	12,149	11,562	43,638
Gross profit					
2004	9,282	4,036	5,557	6,231	25,106
2003	5,526	60	7,812	7,646	21,044
Net loss from continuing operations					
2004	(6,750 )	(13,023 )	(9,577 )	(7,578 )	(36,928 )
2003	(9,603 )	(16,006 )	(5,905 )	(7,384 )	(38,898 )
Net income (loss) from discontinued operations					
2004	(731 )	(119 )	48	17,889	17,087
2003	407	401	668	675	2,151
Net income (loss)					
2004	(7,481 )	(13,142 )	(9,529 )	10,311	(19,841 )
2003	(9,196 )	(15,605 )	(5,237 )	(6,709 )	(36,747 )
Basic and diluted net loss per share from continuing operations					
2004	(0.23 )	(0.45 )	(0.33 )	(0.26 )	(1.26 )
2003	(0.35 )	(0.57 )	(0.20 )	(0.25 )	(1.38 )
Basic and diluted net income (loss) per share from discontinued operations					
2004	(0.03 )	0.00	0.00	0.61	0.58
2003	0.01	0.01	0.02	0.02	0.07
Basic and diluted net income (loss) per share					
2004	(0.26 )	(0.45 )	(0.33 )	0.35	(0.68 )
2003	(0.34 )	(0.56 )	(0.18 )	(0.23 )	(1.31 )

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 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 Annual Report on 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 to ensure that information required to be disclosed in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms.

*Changes in Internal Control Over Financial Reporting .* There were no changes in the Company's internal control over financial reporting during the quarter ended December 31, 2004 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

### **MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. The Company's internal control over financial reporting is designed 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. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

To evaluate the effectiveness of internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, management conducted an assessment, including testing, using the criteria in *Internal Control—Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on their assessment, management concluded the Company maintained effective internal control over financial reporting as of December 31, 2004, based on criteria in *Internal Control—Integrated Framework* issued by the COSO. Management's assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2004, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

### **ITEM 9B. OTHER INFORMATION**

Not applicable.



## 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 2005 Annual Meeting of Stockholders.

#### *Section 16(a) Beneficial Ownership Reporting Compliance*

Section 16(a) of the Securities Exchange Act of 1934, as amended requires our executive officers and director and persons who own more than ten percent (10%) of a registered class of our equity securities to file reports of ownership and changes in ownership with the Securities and Exchange Commission, or SEC, and the National Association of Securities Dealers, Inc. Executive officers, directors and greater than ten percent (10%) stockholders are required by Commission regulation to furnish us with copies of all Section 16(a) forms they file. We believe all of our executive officers and directors complied with all applicable filing requirements during the fiscal year ended December 31, 2004.

### 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.” The following provides additional information as of December 31, 2004 concerning the notes receivable from two officers related to the early exercise of stock options.

Name	Position	Date of Loan	Interest Rate	Principal Amount	Accrued Interest
John Storella	Vice President, Intellectual Property Affairs	September 27, 2000	6.22%	\$ 49,089	\$ 14,423
William Rich	President and Chief Executive Officer	March 8, 2000	6.80%	300,000	112,049

These full recourse notes have five-year terms 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. On March 8, 2005, Dr. Rich paid off his note and accrued interest in full.

The Company also purchased \$894,000 and \$548,000 of inventory in 2002 and 2003, respectively, during which time the supplier, Stanford Research Systems (“SRS”), was deemed to be a related party by virtue of the fact that its President, William Green, was a member of the Board of Directors of Ciphergen Biosystems, Inc. The Company also made non-cash payments to SRS in 2002 in the form of 49,450 shares of Ciphergen common stock under the terms of a joint development agreement. (See Exhibit 10.27 which is incorporated into this annual report by reference.) Mr. Green resigned from the Board on April 7, 2003, and in 2004 SRS was no longer considered a related party.

### 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 AND FINANCIAL STATEMENT SCHEDULES

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

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

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	55
Consolidated Balance Sheets	57
Consolidated Statements of Operations	58
Consolidated Statements of Cash Flows	59
Consolidated Statements of Stockholders' Equity	60
Notes to Consolidated Financial Statements	61
Quarterly Consolidated Financial Data (Unaudited)	82

(2) *Financial Statement Schedules:*

The following financial statement schedule of Ciphergen Biosystems, Inc. for the years ended December 31, 2004, 2003 and 2002 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:*

<u>Number</u>	<u>Description of Document</u>
2.1(6)	Share Purchase Agreement between Ciphergen Biosystems, Inc. and LumiCyte, Inc. dated May 28, 2003
2.2(9)	Asset Purchase Agreement between Ciphergen Biosystems, Inc. and Pall Corporation dated October 27, 2004
3.2(1)	Amended and Restated Certificate of Incorporation of Registrant
3.4(1)	Amended and Restated Bylaws of Registrant
3.5(4)	Certificate of Designation of Rights, Preferences and Privileges of Series A Participating Preferred Stock of Ciphergen Biosystems, Inc.
4.1(1)	Form of Registrant's Common Stock Certificate
4.2(4)	Preferred Shares Rights Agreement between Ciphergen Biosystems, Inc. and Continental Stock Transfer & Trust Company dated March 20, 2002
4.3(7)	Indenture between Ciphergen Biosystems, Inc. and U.S. Bank National Association dated August 22, 2003
10.1(1)	Form of Preferred Stock Purchase Agreement
10.2(1)	Fourth Amended and Restated Investors Rights Agreement dated March 3, 2000
10.3(1)	1993 Stock Option Plan
10.4(1)	Form of Stock Option Agreement
10.5(1)	2000 Stock Plan and related form of Stock Option Agreement
10.6(1)	2000 Employee Stock Purchase Plan
10.7	401(k) Plan
10.8(1)	Form of Warrant
10.9(1)	Form of Proprietary Information Agreement between the Registrant and certain of its employees

- 10.12(1) Lease Agreement 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, dated January 28, 2000, and Amendment No. 1 dated August 8, 2000
- 10.13(1) Employment Agreement between William E. Rich and the Registrant dated August 24, 2000
- 10.14(1) Sublease Agreement between the Registrant and BigBand Networks, Inc. dated August 25, 2000
- 10.15(3) First Amendment dated September 30, 2001 to the Sublease Agreement between the Registrant and BigBand Networks, Inc. dated August 25, 2000
- 10.23(1) MAS License Agreement with IllumeSys Pacific, Inc. dated April 7, 1997
- 10.24(1) MAS License agreement with CIPHERGEN Technologies, Inc. (formerly ISP Acquisition Corporation) dated April 7, 1997
- 10.25(1) Joint Venture Agreement between Registrant and Sumitomo Corporation
- 10.26(1) Distribution and Marketing Agreement between Registrant and CIPHERGEN Biosystems KK dated March 24, 1999
- 10.27(1) Joint Development Agreement between Registrant and Stanford Research Systems, Inc. dated February 2, 1995 and amendment thereto
- 10.28(2) Asset Purchase Agreement by and between Invitrogen Corporation and CIPHERGEN Biosystems, Inc. dated June 25, 2001
- 10.29(3) OEM Agreement between Salford Systems and CIPHERGEN Biosystems, Inc. dated February 27, 2001
- 10.30(3) Supply Agreement between Beckman Coulter, Inc. and CIPHERGEN Biosystems, Inc. dated November 2, 2001
- 10.31(3) Lease Agreement by Natiocredimurs and Cicamur for BioSeptra S.A. dated the 29th of April 1998
- 10.32(5) Stock Purchase Agreement between Registrant and SC Biosciences Corporation dated August 30, 2002
- 10.33(5) 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(5) 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(5) 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(5) Exhibit A, which amends the Supply Agreement between Beckman Coulter, Inc. and Registrant dated November 2, 2001
- 10.37(5) Lease Agreement between Symbion and CIPHERGEN Biosystems A/S dated February 24, 2003
- 10.38(5) Service and Support Agreement between Registrant and Applied Biosystems/MDS Sciex dated April 2, 2001
- 10.39(8)(10) Employment Agreement between Gail Page and Registrant dated January 8, 2004
- 10.40(8) Employment Agreement between Martin Verhoef and Registrant dated January 8, 2004
- 10.41(7) Registration Rights Agreement dated August 22, 2003
- 10.42(8)(10) Amendment One to Distributor License Agreement between the Registrant and Salford Systems, Inc. dated August 8, 2003
- 10.43(8) Extension of Term of Service and Support Agreement between Registrant and Applied Biosystems/MDS Sciex dated March 10, 2004
- 10.44(10) Volume Purchase Agreement between CIPHERGEN Biosystems, Inc. and [] dated November 13, 2001

- 10.45(6)(10) Settlement Agreement and Mutual General Release by and among the Company, IllumeSys Pacific, Inc., Ciphergen Technologies, Inc., Molecular Analytical Systems, Inc., LumiCyte, Inc., and T. William Hutchens dated May 28, 2003
- 10.46(6)(10) Assignment Agreement by and among the Company, IllumeSys Pacific, Inc., Ciphergen Technologies, Inc., Molecular Analytical Systems, Inc., LumiCyte, Inc., and T. William Hutchens dated May 28, 2003
- 10.47(10) License Agreement between Ciphergen Biosystems, Inc. and Molecular Analytical Systems, Inc. dated May 28, 2003
- 10.48(9) Asset Purchase Agreement between Ciphergen Biosystems, Inc. and Pall Corporation dated October 27, 2004
- 21.1 Subsidiaries of Registrant
- 23.1 Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
- 24.1 Power of Attorney (see page 89)
- 27.1(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

- 
- (1) 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
  - (2) 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
  - (3) 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
  - (4) Incorporated by reference to our Registration Statement on Form 8-A, filed with the Securities and Exchange Commission on March 21, 2002
  - (5) 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
  - (6) Incorporated by reference to the corresponding exhibits in our Form 8-K filed with the Securities and Exchange Commission on June 11, 2003
  - (7) Incorporated by reference to our Registration Statement on Form S-3 filed with the Securities and Exchange Commission on October 8, 2003
  - (8) Incorporated by reference to our Annual Report on Form 10-K filed with the Securities and Exchange Commission for the period ended December 31, 2003, file number 000-31617
  - (9) Incorporated by reference to the corresponding exhibit in our Form 8-K filed with the Securities and Exchange Commission on December 6, 2004
  - (10) 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) Exhibits

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

(c) Financial Statement Schedules

The financial statement schedule under Item 15(a)(2) above is 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 21, 2005

## 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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ WILLIAM E. RICH, PH.D.</u> William E. Rich, Ph.D.	President and Chief Executive Officer, and Director (Principal Executive Officer)	March 21, 2005
<u>/s/ MATTHEW J. HOGAN</u> Matthew J. Hogan	Chief Financial Officer (Principal Financial Officer)	March 21, 2005
<u>/s/ DANIEL M. CASERZA</u> Daniel M. Caserza	Corporate Controller (Principal Accounting Officer)	March 21, 2005
<u>/s/ JOHN A. YOUNG</u> John A. Young	Director	March 21, 2005
<u>/s/ JUDY BRUNER</u> Judy Bruner	Director	March 21, 2005

<u>/s/ MICHAEL J. CALLAGHAN</u> Michael J. Callaghan	Director	March 21, 2005
<u>/s/ RAJEN K. DALAL, PH.D.</u> Rajen K. Dalal, Ph.D.	Director	March 21, 2005
<u>/s/ JAMES L. RATHMANN</u> James L. Rathmann	Director	March 21, 2005
<u>/s/ WENDELL WIERENGA, PH.D.</u> Wendell Wierenga, Ph.D.	Director	March 21, 2005

**SCHEDULE II**  
**CIPHERGEN BIOSYSTEMS, INC.**  
**VALUATION AND QUALIFYING ACCOUNTS**  
**Years Ended December 31, 2004, 2003 and 2002**  
**(in thousands)**

	<b>Balance at Beginning of Year</b>	<b>Additions Charged to Earnings</b>	<b>Deductions</b>	<b>Other Changes</b>	<b>Balance at End of Year</b>
<b>Allowance for doubtful accounts:</b>					
31 Dec 2004	\$ 553	\$ 214	\$ 295	\$ (225)	\$ 247
31 Dec 2003	344	484	301	26	553
31 Dec 2002	324	443	436	13	344
<b>Inventory reserve:</b>					
31 Dec 2004	1,338	1,843	219	(965)	1,997
31 Dec 2003	735	691	216	128	1,338
31 Dec 2002	865	254	472	88	735
<b>Deferred tax valuation allowance:</b>					
31 Dec 2004	50,250	6,946	—	—	57,196
31 Dec 2003	34,528	15,722	—	—	50,250
31 Dec 2002	22,212	12,316	—	—	34,528

**SUMMARY PLAN DESCRIPTION**

**Ciphergen Biosystems Inc. 401(k) Plan**

**I. BASIC PLAN INFORMATION**

- I. ACCOUNT
- II. BENEFICIARY
- III. EMPLOYEE
- IV. EMPLOYER
- V. ERISA
- VI. HIGHLY COMPENSATED EMPLOYEE
- VII. NON-HIGHLY COMPENSATED EMPLOYEE
- VIII. PARTICIPANT
- IX. PLAN ADMINISTRATOR
- X. PLAN NUMBER
- XI. PLAN SPONSOR
- XII. PLAN YEAR
- XIII. SERVICE OF PROCESS
- XIV. TRUSTEE

**II. PARTICIPATION**

- I. ELIGIBILITY REQUIREMENTS

**III. CONTRIBUTIONS**

- I. COMPENSATION
- II. EMPLOYEE PRETAX CONTRIBUTIONS
  - 1. *Regular Contributions*
  - 2. *Age 50 Or Over Catch-Up Contributions*
- III. EMPLOYER MATCHING CONTRIBUTIONS
  - 1. *Discretionary Matching Contributions*
- IV. NONELECTIVE EMPLOYER CONTRIBUTIONS
  - 1. *Discretionary Nonelective Employer Contributions*
  - 2. *Qualified Nonelective Contributions*
- V. LIMIT ON CONTRIBUTIONS
- VI. ROLLOVER CONTRIBUTIONS

**IV. INVESTMENTS**

- I. INVESTMENTS
- II. STATEMENT OF ACCOUNT
- III. 404(C) ELECTION

**V. VESTING**

- I. FORFEITURE AND RE-EMPLOYMENT

**VI. PARTICIPANT LOANS**

- I. LOAN RULES
  - 1. *Loan Application*
  - 2. *Loan Amount*
  - 3. *Number of Loans*
  - 4. *Interest Rate*
  - 5. *Loan Repayments And Loan Maturity*
  - 6. *Source of Loan Proceeds*
  - 7. *Default or Termination Of Employment*

**VII. IN SERVICE WITHDRAWALS**



- I. HARDSHIP WITHDRAWALS
- II. WITHDRAWALS AFTER AGE 59 1/2
- III. WITHDRAWALS AFTER AGE 70 1/2
- IV. WITHDRAWALS AFTER NORMAL RETIREMENT AGE
- V. WITHDRAWALS OF ROLLOVER CONTRIBUTIONS
- VIII. DISTRIBUTION OF BENEFITS**
  - I. ELIGIBILITY FOR BENEFITS
  - II. DISTRIBUTABLE EVENTS
    - 1. *Death*
    - 2. *Disability*
    - 3. *Retirement*
    - 4. *Termination of Employment*
  - III. FORM OF PAYMENTS
    - 1. *Lump Sum Distributions*
      - A) CASH DISTRIBUTION
      - B) DIRECT ROLLOVER DISTRIBUTION
      - C) COMBINATION CASH DISTRIBUTION AND DIRECT ROLLOVER DISTRIBUTIONS
    - 2. *Installment Distributions*
- IX. MISCELLANEOUS INFORMATION**
  - I. BENEFITS NOT INSURED
  - II. ATTACHMENT OF YOUR ACCOUNT
  - III. PLAN-TO-PLAN TRANSFER OF ASSETS
  - IV. PLAN AMENDMENT
  - V. PLAN TERMINATION
  - VI. INTERPRETATION OF PLAN
  - VII. ELECTRONIC DELIVERY
- X. INTERNAL REVENUE SERVICE TESTS**
  - I. NON-DISCRIMINATION TESTS
  - II. TOP HEAVY TEST
- XI. PARTICIPANT RIGHTS**
  - I. CLAIMS
    - 1. *Claims Procedures*
    - 2. *Review Procedures*
  - II. STATEMENT OF ERISA RIGHTS
- XII. SERVICES AND FEES**
- XIII. APPENDIX A: INVESTMENT OPTIONS**
- XIV. APPENDIX B: SPECIAL TAX NOTICE REGARDING PLAN PAYMENTS**

**SUMMARY PLAN DESCRIPTION  
CIPHERGEN BIOSYSTEMS INC. 401(K) PLAN**

The CIPHERGEN Biosystems Inc. 401(k) Plan of CIPHERGEN Biosystems, Inc. has been amended effective as of 10/01/2004 (the 'Effective Date'). The original effective date of the Plan is 01/01/1996. This 401(k) and Profit Sharing Plan is a defined contribution plan and is intended to be a qualified retirement plan under the Internal Revenue Code Section 401(a).

The purpose of the Plan is to enable eligible employees to save for retirement. As well as retirement benefits, the Plan provides certain benefits in the event of death, disability, or other termination of employment. The Plan is for the exclusive benefit of eligible employees and their Beneficiaries.

This booklet is called a Summary Plan Description ("SPD") and it contains a summary in understandable language of your rights and benefits under the Plan. If you have difficulty understanding any part of this SPD, you should contact the Plan Administrator identified in the Basic Plan Information section of this document during normal business hours for assistance.

This SPD is a brief description of the principal features of the governing Basic Plan Document and Trust Agreement and is not meant to interpret, extend or change these provisions in any way. This SPD also includes provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 ("EGTRRA"), which have been adopted as good faith amendments in accordance with IRS Notice 2001-57, and which are generally effective on the first day of the first plan year beginning in 2002, unless otherwise specified herein. A copy of the Basic Plan Document and Trust Agreement, as amended, is on file with the Plan Administrator and may be read by any employee at any reasonable time. The Basic Plan Document and Trust Agreement (as amended) shall govern if there is a discrepancy between this SPD and the actual provisions of the Plan.

## **I. Basic Plan Information**

The information in this section contains definitions to some of the terms that may be used in this Summary Plan Description. If the first letter of any of these definitions below is capitalized then it represents the indicated defined term.

### **I. Account**

An account shall be established by the Trustee to record contributions made on your behalf and any related income, expenses, gains or losses. It may also be referred to as an account balance.

### **II. Beneficiary**

This is the person or persons (including a trust) you designate, or who are identified by the plan document if you fail to designate or improperly designate, who will receive your benefits in the event of your death. You may designate more than one beneficiary.

### **III. Employee**

An employee is an individual who is employed by your Employer as a common law employee or, in certain cases, as a leased employee and is not terminated.

### **IV. Employer**

The name, address and business telephone number of your Employer is:

Ciphergen Biosystems, Inc.  
6611 Dumbarton Circle  
Fremont, CA 94555  
(510) 505-2143

Your Employer's federal tax identification number is: 33-0595156.

### **V. ERISA**

The Employee Retirement Income Security Act of 1974 (ERISA) identifies the rights of Participants and Beneficiaries covered by a qualified retirement plan.

### **VI. Highly Compensated Employee**

An Employee is considered a highly compensated employee if (i) at anytime during the current or prior year you own, or are considered to own, at least five percent of your Employer, or (ii) received compensation from your Employer during the prior year in excess of \$90,000, as adjusted and you are in the top paid group consisting of the top 20% of Employees ranked by Compensation.

### **VII. Non-Highly Compensated Employee**

An Employee who is not a Highly Compensated Employee.

### **VIII. Participant**

A participant is an eligible Employee who has satisfied the eligibility and entry date requirements and is eligible to participate in the Plan or a formerly eligible Employee who has an account balance remaining in the Plan.

### **IX. Plan Administrator**

The Plan Administrator is responsible for the administration of the Plan and its duties are identified in the Plan Document. In general, the Plan Administrator is responsible for providing you and your Beneficiaries

with information about your rights and benefits under the Plan. The name, address and business telephone number of the Plan Administrator is:

Ciphergen Biosystems, Inc.  
6611 Dumbarton Circle  
Fremont, CA 94555  
(510) 505-2143

**X. Plan Number**

The three digit IRS number for the Plan is 001.

**XI. Plan Sponsor**

Your Employer is the sponsor of the Plan.

**XII. Plan Year**

The Plan Year is the twelve-month period ending on the last day of December. Your Employer may only change or have changed the Plan Year by amending and restating to a new Plan Document.

**XIII. Service of Process**

The plan's agent for service of legal process is the Plan Administrator.

**XIV. Trustee**

The trustee is responsible for trusteeing the Plan's assets. The trustee's duties are identified in the Trust Agreement and relate only to the assets in its possession. The name and address of the Plan's Trustee are:

Fidelity Management Trust Company  
Attn: FIIS Risk Management  
82 Devonshire Street  
Boston, MA 02109

**II. Participation**

**I. Eligibility Requirements**

You are eligible to participate in the Plan if you are an Employee and are not:

- a resident of Puerto Rico
- Employees in an internship status or on an internal temporary status

The plan requires you to attain the age of 21. Upon satisfying this requirement you will become eligible to participate in the Plan on the first day of each month.

Once you become a Participant you are eligible to participate in the Plan until you terminate your employment with your Employer or become a member of a class of Employees excluded from the Plan. If you terminate your employment after you have met the eligibility requirements, and are later re-employed by your Employer, you will again be eligible to participate in the Plan after you complete one hour of service.

**III. Contributions**

After you satisfy the participation requirements in Section II of this Summary Plan Description, you will be eligible to make pretax contributions. In addition, your Employer may make matching and Nonelective

Employer contributions to your Account. The type(s) of contributions available under the Plan are described in this section.

## **I. Compensation**

Compensation must be defined to compute contributions under the Plan. Eligible compensation for computing contributions under the Plan is the taxable compensation for a Plan Year reportable by your Employer on your IRS Form W-2, excluding reimbursements or other expense allowances, fringe benefits, moving expenses, deferred compensation and welfare benefits and including salary reduction contributions you made to an Employer sponsored cafeteria plan, 401(k) plan or 403(b) program. In addition, compensation excludes:

- The taxable value of a qualified or non-qualified stock option

Compensation for your first year of eligible Plan participation will be based upon eligible compensation paid for the entire Plan Year. Tax laws limit the amount of compensation that may be taken into account each Plan Year; the maximum amount for the 2004 Plan Year is \$205,000.00 and the maximum amount for the 2005 Plan Year is \$210,000.

## **II. Employee Pretax Contributions**

### **1. Regular Contributions**

You may elect to contribute a percentage of your eligible compensation into the Plan after you satisfy the Plan's eligibility requirements. The percentage you defer is subject to an annual limit of the lesser of 90% of eligible compensation or \$13,000 in a calendar year (in 2004; for calendar years following 2002, legislation has increased the deferral limit by \$1,000 each year until it reaches \$15,000 for 2006 and then thereafter as adjusted by the Secretary of the Treasury ). Your pretax contributions cannot be forfeited for any reason, however, there are special Internal Revenue Code rules which must be satisfied and may require that some of your contributions be returned to you. The Plan Administrator will notify you if any of your contributions will be returned. You may increase or decrease the amount you contribute as of the beginning of each payroll period. You may completely suspend your contributions on a prospective basis with sufficient notice to the Plan Administrator. Thereafter, if you want to resume your Employee pretax contributions as of Beginning of each Payroll Period, you must complete a new election form.

### **2. Age 50 or Over Catch-up Contributions**

The Plan provides that participants who are projected to be age 50 or older by the end of the calendar year and who are making Deferral Contributions to the Plan may also make a catch-up contribution of up to \$1,000 in 2002, increasing by \$1,000 each year until reaching \$5,000 in 2006, when such amount will be indexed in \$500 increments. You do not need to make a special election if you are eligible for catch-up contributions; in general, any pretax contributions you make above the plan limit or IRS limit on deferrals will be treated as a catch-up contribution.

## **III. Employer Matching Contributions**

All matching contributions will be computed by your Employer based on your compensation contributed to the plan each Plan Year. You become eligible for matching contributions only if you make Employee pretax contributions. Matching contributions will not be made on any catch-up contributions.

## **1. Discretionary Matching Contributions**

Each Plan Year your Employer may make discretionary matching contributions of a percent, if any, to be determined in the plan year based on a percentage of your Employee pretax contributions. Your Employer will communicate the amount of any annual discretionary matching contributions. All matching contributions will be computed by your Employer based on your compensation contributed to the Plan Year. Employer matching contributions must be allocated to your Account in the Plan within prescribed legal time limits.

## **IV. Nonelective Employer Contributions**

### **1. Discretionary Nonelective Employer Contributions**

Your Employer may make annual discretionary Nonelective Employer contributions in an amount to be determined at Plan Year end by the Board of Directors. Nonelective Employer contributions, if any, made to the Plan by your Employer will be allocated to your Account in the ratio that your eligible compensation bears to the total eligible compensation paid to all eligible Participants.

### **2. Qualified Nonelective Contributions**

Your Employer may designate all or a portion of any Nonelective Employer contributions for a Plan Year as “qualified nonelective contributions” and allocate them to Non-Highly Compensated Employees to help the Plan pass one or more annually required Internal Revenue Code nondiscrimination test(s). Any such contributions will be allocated to eligible Participant Accounts as either a percentage of eligible compensation or a flat dollar amount. You will be 100% vested in these contributions and may not request a hardship withdrawal of these contributions.

## **V. Limit on Contributions**

Federal law requires that amounts contributed by you and on your behalf by your Employer for a given limitation year generally may not exceed the lesser of:

- \$41,000 (or such amount as may be prescribed by the Secretary of the Treasury); or
- 100% of your annual compensation.

The limitation year for purposes of applying the above limits is the twelve month period ending December 31st. Contributions under this Plan may not exceed the above limits. If this does occur then excess contributions in your Account may be forfeited or refunded to you based on the provisions of the Plan document. You will be notified by the Plan Administrator if you have any excess contributions and income tax consequences may apply on the amount of any refund you receive.

## **VI. Rollover Contributions**

You can roll over part or all of an eligible rollover distribution you received from a prior employer’s eligible retirement plan or an IRA. An eligible retirement plan includes a qualified plan under Section 401(a) or 403(a), a 403(b) annuity contract, an eligible governmental 457(b) plan, or a taxable distribution from an individual retirement account or individual retirement annuity. You may also roll over qualified plan after-tax employee contributions, provided such Rollover Contribution is made as a direct rollover. Making Rollover Contributions to the Plan which consist of assets other than qualified 401(a) plan assets may result in the loss of favorable capital gains or ten year income averaging tax treatment associated with lump sum distributions from your current Plan balance. If you may be eligible for this special tax treatment, you should consult your tax advisor and carefully consider the impact of making a Rollover Contribution to the Plan. The Plan Administrator must approve any Rollover Contribution and reserves the right to refuse to accept any such contribution. If your Rollover Contribution to the Plan is not a direct rollover ( *i.e.* you received a cash distribution from your prior employer’s plan or from your rollover IRA), then it must be received by the Trustee within 60 days of your receipt of the distribution. Rollover Contributions shall only

be made in the form of cash or allowable mutual fund shares. You may make a rollover contribution to the Plan before becoming a Participant. However, you will not become a Participant in the Plan and become entitled to make pretax contributions and share in Employer contributions until you have met the Plan's eligibility and entry date requirements. Your Rollover Contributions account will be subject to the terms of this Plan and will always be fully vested and nonforfeitable. In general, if you receive an eligible rollover distribution as a surviving spouse of a participant or as a spouse or former spouse who is an "alternate payee" pursuant to a qualified domestic relations order ("QDRO"), you may also make a Rollover Contribution to the Plan.

#### **IV. Investments**

##### **I. Investments**

You have the right to vote any mutual fund proxy based on the number of shares you own. If you want additional information about any investment alternative, you may request any of the following information by calling Fidelity at 1-800-294-4015:

- A description of the annual operating expenses of each investment fund (e.g., investment management fees, administrative fees, transaction costs) which reduce the rate of return to you, and the aggregate amount of such expenses expressed as a percentage of average net assets of the designated investment alternative;
- Prospectuses, financial statements and reports, plus any other material available to the Plan which relates to the available investment alternatives;
- A list of the assets comprising the portfolio of each investment fund, the value of such assets (or the proportion of the investment fund which it comprises), and with respect to each such asset which is a fixed rate investment contract issued by a bank, savings and loan association or insurance company, the name of the issuer of the contract, the term of the contract and the rate of return on the contract;
- Information concerning the value of shares or units of the investment funds available to Participants under the Plan, as well as the past investment performance of such funds, determined net of expenses, on a reasonable and consistent basis.

##### **II. Statement of Account**

The assets in the Plan are invested in available investment options and a separate Account is established for each Participant who receives a contribution. The value of your Account is updated each business day to reflect any contributions, exchanges between investment options, investment earnings or losses for each investment option and withdrawals. A quarterly statement showing the value of your Account will generally be delivered to you within 15 business days after the following dates: February 28th, May 31st, August 31st, November 30th. You may also access the activity in your Account through the Internet by using Fidelity's [www.401kxpress.com](http://www.401kxpress.com) website. Please contact the Plan Administrator for further information.

##### **III. 404(c) Election**

The Plan is intended to qualify as a participant-directed plan under Section 404(c) of ERISA. This means that you are responsible for your investment decisions under the plan. The plan fiduciaries, including Fidelity Management Trust Company and Ciphergen Biosystems, Inc., are not responsible for any losses incurred as a result of your investment decisions.

## V. Vesting

The term vesting refers to your nonforfeitable right to the money in your Account. You receive vesting credit for the number of years that you have worked for your Employer. If you terminate your employment with your Employer, you may be able to receive a portion or all of your Account based on your vested percentage.

You are always 100% vested in your rollover contributions, Employee pretax contributions, qualified nonelective contributions and any earnings thereon. Your Matching Contributions, Nonelective Employer contributions and any earnings thereon will be vested in accordance with the following schedule:

Years of Service for Vesting	Vesting Percentage
less than 1	0 %
1	33 %
2	66 %
3	100 %

The Plan has changed the methodology used to determine your years of service. Previously you received vesting credit for a year of service under the 'general method' if you worked more than 1,000 hours in a Plan Year. Vesting under the Plan is now based upon the elapsed time method. Hours of service are not counted and instead periods of service are computed. A period of service is determined by the time you work for your Employer. Only your whole years of service with your Employer will be counted to compute your years of service for vesting purposes. For example, if you work three years and ten months then for vesting purposes you will receive credit for three years of service. If you were hired before October 1, 2004 then you will receive vesting credit for your years of service with your Employer based upon the following:

	Applicable Year(s)	Method	Measurement Period
1.	Year(s) before 2004	General	Jan. 1 to Dec. 31
2.	Jan. 1, 2004 to Dec. 31, 2004	General or Elapsed Time*	Jan. 1 to Dec. 31
3.	Year(s) after Jan. 1, 2005	Elapsed Time	Jan. 1 to Dec. 31

\* You will receive credit for this year based upon whichever method is more favorable to you.

If you were hired on or after October 1, 2004 then you will receive vesting credit for your years of service with your Employer based only on the elapsed time method. In this case, your measurement period for determining your years of service will generally be based upon your date of employment with your Employer.

### I. Forfeiture and Re-employment

If you terminate your employment with your Employer and are less than 100% vested in your Employer Account, you may forfeit the non-vested portion of your Employer Account. A forfeiture will occur in the Plan Year that you receive a distribution of your entire vested Account, or if you do not receive a distribution, after five consecutive one year breaks in service. Forfeitures are retained in the Plan and will first be used to pay administrative expenses under the Plan, as directed by the Employer. Any remaining amounts will be used to reduce future Employer contributions payable under the Plan.

Example: (This example is for illustration purposes only.) Assuming your vesting schedule is as follows:

Years of Service	Vesting Percentage
less than 2	0 %
2	20 %
3	40 %
4	60 %
5	80 %
6	100 %

You terminate your employment in 2005 with five years of service and the following Account:



Source	Amount	Vested Percentage	Vested Amount
Employee	\$ 2,000	100 % †	\$ 2,000
Employer	\$ 1,000	80 %	800
Total	\$ 3,000		\$ 2,800

You received a \$2,800 distribution in 2005 from the Plan. This represented a complete distribution of your Account. A \$200 forfeiture will occur in 2005.

† You are always 100% vested in your own employee pretax contributions and earnings in the Plan.

A one-year break in service occurs when you have less than one hour of service in the twelve consecutive month period beginning with the earlier of the day your employment terminates or the 12 month anniversary of the date on which you are otherwise first absent from service. Notwithstanding the above, if you are absent from work due to a maternity or paternity leave, then the 12-consecutive month period beginning on the first anniversary of the first date of that absence will not be a one-year break in service, and if you are absent from work due to a leave of absence under the Family and Medical Leave Act, no 12-consecutive month period beginning on the first anniversary of the first date of that absence, and subsequent anniversaries, during which the absence continues, will be a one-year break in service, provided you return to work following the leave.

When any period of absence is due to military service entitling you to reemployment rights under federal law and you return to work at the Employer or a Related Employer following that absence, there will be no break in service and you will be credited with service for the entire period of that absence.

If you were a Participant when you terminated your employment and are re-employed by your Employer, then you will again become a Participant on the date you complete one hour of service. Your period of employment before you were rehired is referred to as your pre-break service. Your period of employment after you were rehired is referred to as your post-break service. If you are re-employed after incurring five consecutive one-year breaks in service then your post-break service will not count in determining your vesting percentage in your pre-break Account balance. Your post-break service will count in determining your vesting percentage in your pre-break Account balance and any forfeited amounts will be restored to your Account if:

- (1) You are re-employed by your Employer before you incur five consecutive one-year breaks in service, and
- (2) If you received distribution of your vested Account, you repay the full amount of the distribution before the end of the five-year period that begins on the date you are re-employed.

Example: Assume you terminate employment with your Employer in 2002 with an Account balance of \$10,000, of which \$6,000 is vested. You elect to receive a lump sum distribution of your vested Account balance. The remainder, or \$4,000, is forfeited in 2002. If you are rehired on January 1, 2004 and repay the \$6,000 distribution prior to January 1, 2009, the \$4,000 previously forfeited will be restored to your Account. Additionally, your service after January 1, 2004 is counted towards vesting your pre-break Account balance of \$10,000

## **VI. Participant Loans**

### **I. Loan Rules**

Loans shall be made available to all qualifying Participants on a reasonably equivalent basis. However, loans may not be made to an eligible Employee who makes a rollover contribution and who has not satisfied the Plan's age, service and entry date requirements. Loans are not considered distributions and are not subject to federal or state income taxes, provided they are repaid as required. While you do have to pay interest on your loan, both the principal and interest are reinvested in your account. Loans will be based on the following procedures:

#### **1. Loan Application**

If you have met the Plan's eligibility and entry date requirements, you may only apply for 1 loan each Plan Year. Loans will be allowed for any purpose. To apply for a loan, please contact the Fidelity Retirement Benefits Line at 1-800-294-4015 between the hours of 8:30 AM (ET) and 8:00 PM (ET). You will incur a set-up fee for your loan.

#### **2. Loan Amount**

The minimum loan is \$1,000 and the maximum amount is the lesser of one-half of your vested Account balance or \$50,000 reduced by the highest outstanding loan balance in your Account during the prior twelve month period. All of your loans from plans maintained by your Employer or a Related Employer will be considered for purposes of determining the maximum amount of your loan. Up to 50% of your vested Account balance may be used as collateral for any loan.

#### **3. Number of Loans**

You may only have one loan outstanding at any given time. You may not refinance an existing loan or obtain a second loan for the purpose of paying off the existing loan.

#### **4. Interest Rate**

All loans shall bear a reasonable rate of interest as determined by the Plan Administrator based on the prevailing interest rates charged by persons in the business of lending money for loans which would be made under similar circumstances. The interest rate shall remain fixed throughout the duration of the loan.

#### **5. Loan Repayments and Loan Maturity**

Loans from the Plan must be repaid in level payments generally through after-tax payroll deductions on at least a quarterly basis over a period not to exceed five years unless for the purchase of your principal residence in which case the loan repayment period may not extend beyond ten years from the date of the loan. If repayment is not made by payroll deduction, a loan shall be repaid to the Plan by payment to the Employer. The level repayment requirement may be waived: 1) for a period of up to one year if you are on an unpaid non-military leave of absence; or 2) if your leave is because you are performing military service, for the entire length of time missed on leave. Your loan will accrue interest during your leave, and upon your return will be reamortized if: 1) the original loan was for a term of less than five years or 2) if you return from a military leave of absence, in which case your loan will be reamortized to extend the full length of the loan by the length of the leave. If a loan is not repaid within its required repayment period, it will be treated as a taxable distribution to you.

## **6. Source of Loan Proceeds**

Loan proceeds will be withdrawn from available contribution sources and investment options in the order established by the Trustee. You may only borrow from the following contribution sources:

- \* Employee Deferral
- \* Rollover
- \* QNEC
- \* Discretionary Match
- \* Discretionary Profit Sharing
- \* After-Tax Rollover

Please contact the Plan Administrator for more information.

## **7. Default or Termination of Employment**

The Plan Administrator shall consider a loan in default if any scheduled repayment remains unpaid as of the last business day of the calendar quarter following the calendar quarter in which a loan is initially considered past due. In the event of a default, death, disability or termination of employment, the entire outstanding principal and accrued interest shall be immediately due and payable. In addition, you will be deemed to have received a taxable distribution from the Plan

## **VII. In Service Withdrawals**

If you qualify and your request is approved by the Plan Administrator, you may obtain a withdrawal from the Plan while you are still an Employee. The following types of withdrawals are available under the Plan:

### **I. Hardship Withdrawals**

If you are an Employee and request a hardship withdrawal, and it is approved by the Plan Administrator, you may withdraw your employee pretax contributions to satisfy any of the following immediate and heavy financial needs: (1) medical expenses for you, your spouse, children or dependents; (2) the purchase of your principal residence; (3) to prevent your eviction from or foreclosure on your principal residence; or (4) to pay for post-secondary education expenses (tuition, related educational fees, room and board) for you, your spouse, children or dependents for the next twelve months; or any other immediate and heavy financial need as determined based on Internal Revenue Service regulations. In accordance with Internal Revenue Service regulations you must first exhaust all other assets reasonably available to you prior to obtaining a hardship withdrawal. This includes obtaining a loan from this Plan and any other qualified plan maintained by your Employer. Your pretax contributions to this Plan, and any other qualified or non-qualified plan, will be suspended for six months after your receipt of the hardship withdrawal. The minimum hardship withdrawal is \$500.

### **II. Withdrawals After Age 59 1/2**

If you have reached age 59 1/2 then you may elect to withdraw all or a portion of your vested Account while you are still employed by your Employer.

### **III. Withdrawals After Age 70 1/2**

You are required to receive a minimum required distribution from the Plan by April 1st of the later of the calendar year after you reach age 70 1/2 or the year you retire. (If you are considered a five percent owner of your Employer, you must receive your minimum distribution by April 1st of the calendar year after you reach 70 1/2.) You must then receive a certain amount of your Account balance each Plan Year from the Plan. The amount of your distribution is based on several factors and you should contact the Plan Administrator for further information.

#### **IV. Withdrawals After Normal Retirement Age**

You may elect to withdraw your vested Account balance after you reach the Plan's normal retirement age, 65, or delay it until you retire. Notwithstanding the above, by law certain contributions including employee pretax, qualified matching, matching, qualified nonelective, and nonelective contributions cannot be withdrawn prior to age 59 1/2.

#### **V. Withdrawals of Rollover Contributions**

If you have a balance in your Rollover Contributions Account, you may elect to withdraw all or a portion of it.

In-Service withdrawals will be withdrawn from available contribution sources and investment options in the order established by the Plan Administrator. Consult your Plan Administrator for more information. The amount of any taxable withdrawal will be subject to Federal and state, if applicable, income taxes. In general, the amount of any taxable withdrawal that qualifies as an eligible rollover distribution and is not rolled over into an Individual Retirement Account or another qualified employer retirement plan will be subject to 20% Federal Income Tax withholding and any applicable State Income Tax withholding. A 10% Internal Revenue Code early withdrawal penalty tax may apply to the amount of your withdrawal if you are under the age of 59 1/2 and do not meet one of the Internal Revenue Code exceptions.

Note: Certain transactions in your Account (for example, contributions, distributions, and rollovers) may be treated differently for state tax purposes than for federal tax purposes. Please consult with your Plan Administrator, tax advisor or Investment Professional as appropriate.

The Plan Administrator will notify you of the appropriate procedures to make a withdrawal from the Plan. The amount of any withdrawal will be withdrawn from available investment options in the order established by the Plan Administrator. Consult your Plan Administrator for more information.

### **VIII. Distribution of Benefits**

#### **I. Eligibility For Benefits**

If you have not attained the Plan's normal retirement age, 65, you are eligible to request a distribution of your vested Account balance. A distribution can only be made to you if you request one due to your disability, retirement, or termination of employment from your Employer and any Related Employer. Your Beneficiary or Beneficiaries may request a distribution of your vested Account balance in the event of your death.

You may defer receipt of your distribution until a later date. However you cannot postpone it if your vested Account balance is \$5,000 or less in which case the Plan Administrator may direct the Trustee to distribute it to you as a lump sum distribution without your consent. If your vested Account balance exceeds \$5,000, you may delay your distribution until you are required by law to receive minimum required distributions. You will have a continuing election to request a distribution if you elect to postpone your distribution unless you are re-employed by your Employer or any Related Employer. The value of your Account balance will continue to increase or decrease, as appropriate, based on the investment returns until it is distributed. Your written consent will be required for any distribution if your vested Account balance is greater than \$5,000.

You should consult with your tax advisor to determine the financial impact of your situation before you request a distribution. You may apply for a distribution by calling the Fidelity Retirement Benefits Line at 1-800-294-4015 and/or by accessing the NetBenefits<sup>SM</sup> web site at [www.401kxpress.com](http://www.401kxpress.com). All telephone calls will be recorded. The approval of your Plan Administrator will be required before any distribution can be completed.

## **II. Distributable Events**

You are eligible to request a distribution of your vested Account balance based on any of the following events:

### **1. Death**

If you are a Participant in the Plan and die, your vested Account balance, if any, will be paid to your designated Beneficiary or Beneficiaries. If you are an Employee of your Employer or a Related Employer at the time of your death, your Account balance will automatically become 100% vested. You may designate a Beneficiary or Beneficiaries on a designation form that must be properly signed and filed with the Plan Administrator. If you are married and want to designate someone other than your spouse as your primary Beneficiary, your spouse must consent to this designation by signing the form. His/her signature must be witnessed by a Plan representative or a notary public. You should contact the Plan Administrator to obtain a designation of beneficiary form.

### **2. Disability**

If you become disabled while you are employed by your Employer or a Related Employer, so that you are determined disabled by a physician selected by the Plan Administrator, the full value of your Account balance may be distributed to you upon request. You will automatically become 100% vested in your Account balance when you become disabled. You may request a distribution of your Account balance only if you terminate your employment with your Employer or Related Employer.

### **3. Retirement**

You do not have to terminate your employment with your Employer just because you attain your normal retirement age of 65. You will automatically become 100% vested in your Account balance. You may take an in-service distribution from your vested Account balance once you attain your normal retirement age of 65, even if you are still employed.

### **4. Termination of Employment**

If you terminate your employment with your Employer and any Related Employer, you may elect to receive a distribution of your vested Account balance from the Plan.

## **III. Form of Payments**

The forms of payments that you may elect under the Plan are listed in this section.

### **1. Lump Sum Distributions**

Your entire vested Account balance will be paid to you in a single cash distribution or other distribution that you elect.

#### **a) Cash Distribution**

Any eligible rollover distribution paid directly to you will be subject to mandatory Federal income tax withholding of 20% of the taxable distribution and the remaining amount will be paid to you. You cannot elect out of this tax withholding but you can avoid it by electing a direct rollover distribution as described below. This withholding is not a penalty but a prepayment of your Federal income taxes.

You may rollover the eligible taxable distribution you receive to an individual retirement account (IRA) or your new employer's plan, if it accepts rollover contributions and you roll over this distribution within 60 days after receipt. You will not be taxed on any amounts timely rolled over into the IRA or your new employer's Plan until those amounts

are later distributed to you. Any amounts not rolled over may also be subject to certain early withdrawal penalties prescribed under the Internal Revenue Code.

**b) Direct Rollover Distribution**

As an alternative to a cash distribution paid directly to you, you may request a rollover distribution of your entire eligible Account balance directly into an Advisor Retirement Connection-IRA, a Non-Advisor Retirement Connection-IRA, or to your new employer's eligible plan if it accepts rollover contributions or a 403(a) Annuity. Federal income taxes will not be withheld on any direct rollover distribution.

1. Rollover to an Advisor Retirement Connection IRA - You must complete the appropriate documentation and an Advisor Retirement Connection IRA application. If your distribution is authorized by the Plan Administrator, it will be forwarded to the Trustee for processing. Your vested Account balance will be directly rolled over to an Advisor Retirement Connection IRA.
2. Rollover to a Non-Advisor Retirement Connection IRA - You must complete the appropriate documentation and indicate the name and address of the trustee, and IRA account number. If your distribution is authorized by the Plan Administrator, it will be forwarded to the Trustee for processing and they will issue a check payable to the IRA trustee or custodian for your benefit. The check will be mailed directly to you and contain the notation "direct rollover" and you will be responsible for forwarding it to the trustee or custodian of your IRA.
3. Rollover to your New Employer's Retirement Plan - You should check with your new employer to determine if its plan will accept rollover contributions. If allowed, you must complete the appropriate documentation and indicate the name, address and plan number of your new employer's retirement plan. If your distribution is authorized by the Plan Administrator, it will be forwarded to the Trustee for processing and they will issue a check payable to the trustee of your new employer's plan. The check will contain the notation "direct rollover" and will be mailed directly to you and you will be responsible for forwarding it on to the new trustee.
4. Rollover to a 403(a) Annuity - You must complete the appropriate documentation and indicate the name and address of the trustee or custodian, and 403(a) Annuity account number. If your distribution is authorized by the Plan Administrator, it will be forwarded to the Trustee for processing and they will issue a check payable to the 403(a) Annuity trustee or custodian for your benefit. The check will be mailed directly to you and contain the notation "direct rollover" and you will be responsible for forwarding it to the trustee or custodian of your 403(a) Annuity.

**c) Combination Cash Distribution and Direct Rollover Distributions**

You may request that part of your distribution be paid directly to you and the balance rolled into an IRA, your new employer's retirement plan, or a 403(a) Annuity. Any cash distribution will be subject to the Federal income tax withholding rules referred to in 1a) and any direct rollover distribution in accordance with 1b). Your direct rollover distribution must be at least \$500.

You will pay income tax on the amount of any taxable distribution you receive from the Plan unless it is rolled into an IRA or your new employer's plan. A 10% IRS premature distribution penalty tax may also apply to your taxable distribution if you are under age 59½ (or under age 55 and separated from service), unless it is rolled into an IRA or

another eligible plan. The 20% Federal income tax withheld under this section may not cover your entire income tax liability. In the case of a combination distribution, if any portion of the eligible rollover distribution is attributable to after-tax contributions, such contributions will be considered to be withdrawn last for tax purposes. Consult with your tax advisor for further details.

## **2. Installment Distributions**

Your vested Account balance will be paid to you in substantially equal amounts over a period of time. You may elect annual or more frequent installments. You may elect to receive a lump sum distribution after you start to receive installment distributions, by completing the appropriate documentation. The direct rollover distribution rules referred to in the lump sum distribution section also apply to installment distributions.

## **IX. Miscellaneous Information**

### **I. Benefits Not Insured**

Benefits provided by the Plan are not insured or guaranteed by the Pension Benefit Guaranty Corporation under Title IV of the Employee Retirement Income Security Act of 1974 because the insurance provisions under ERISA are not applicable to this particular Plan. You will only be entitled to the vested benefits in your Account based upon the provisions of the Plan and the value of your Account will be subject to investment gains and losses.

### **II. Attachment of Your Account**

Your Account may not be attached, garnished, assigned or used as collateral for a loan outside of this Plan except to the extent required by law. Your creditors may not attach, garnish or otherwise interfere with your Account balance except in the case of a proper Internal Revenue Service tax levy or a Qualified Domestic Relations Order (QDRO). A QDRO is a special order issued by the court in a divorce, child support or similar proceeding. In this situation, your spouse, or former spouse, or someone other than you or your Beneficiary, may be entitled to a portion or all of your Account balance based on the court order. Participants and Beneficiaries can obtain, without a charge, a copy of QDRO procedures from the Plan Administrator.

### **III. Plan-to-Plan Transfer Of Assets**

Your Employer may direct the Trustee to transfer all or a portion of the assets in the Account of designated Participants to another plan or plans maintained by your Employer or other employers subject to certain restrictions. The plan receiving the Trust Funds must contain a provision allowing the transfer and preserve any benefits required to be protected under existing laws and regulations. In addition, a Participant's vested Account balance may not be decreased as a result of the transfer to another plan.

### **IV. Plan Amendment**

Your Employer reserves the authority to amend certain provisions of the Plan by taking the appropriate action. However, any amendment may not eliminate certain forms of benefits under the Plan or reduce the existing vested percentage of your Account balance derived from Employer contributions. If you have three or more years of service with your Employer and a Related Employer and the vesting schedule is amended then you will be given a choice to have the vested percentage of future Employer contributions made to your Account computed under the new or the old vesting schedule. The Plan Administrator will provide you with the appropriate information to make an informed decision if the Plan's vesting schedule is amended.

## **V. Plan Termination**

Your Employer has no legal or contractual obligation to make annual contributions or to continue the Plan. Your Employer reserves the right to terminate the Plan at any time by taking appropriate action as circumstances may dictate, with the approval of the Board of Directors. In the event the Plan should terminate, each Participant affected by such termination shall have a vested interest in his Account of 100%. The Plan Administrator will facilitate the distribution of Account balances in single lump sum payments to each Participant in accordance with Plan provisions until all assets have been distributed by the Trustee.

## **VI. Interpretation of Plan**

The Plan Administrator has the power and discretionary authority to construe the terms of the Plan based on the Plan document, existing laws and regulations and to determine all questions that arise under it. Such power and authority include, for example, the administrative discretion necessary to resolve issues with respect to an Employee's eligibility for benefits, credited services, disability, and retirement, or to interpret any other term contained in Plan documents. The Plan Administrator's interpretations and determinations are binding on all Participants, Employees, former Employees, and their Beneficiaries.

## **VII. Electronic Delivery**

This Summary Plan Description and other important Plan information may be delivered to you through electronic means. This Summary Plan Description contains important information concerning the rights and benefits of your Plan. If you receive this Summary Plan Description (or any other Plan information) through electronic means you are entitled to request a paper copy of this document, free of charge, from the Plan Administrator. The electronic version of this document contains substantially the same style, format and content as the paper version.

## **X. Internal Revenue Service Tests**

### **I. Non-Discrimination Tests**

The Plan must pass Internal Revenue Code non-discrimination tests as of the last day of each Plan Year to maintain a qualified Plan. These tests are intended to ensure that the amount of contributions under the Plan do not discriminate in favor of Highly Compensated Employees. In order to meet the tests, your Employer encourages participation from all eligible Employees. Depending upon the results of the tests, the Plan Administrator may have to refund pretax contributions contributed to the Plan and vested matching contributions to certain Highly Compensated Employees, as determined under Internal Revenue Service regulations. Pretax or matching contributions will be refunded to you from applicable investment options. You will be notified by the Plan Administrator if any of your contributions will be refunded to you.

### **II. Top Heavy Test**

The Plan is subject to the Internal Revenue Code "top-heavy" test. Each Plan Year, the Plan Administrator tests this Plan, together with any other Employer-sponsored qualified plans that cover one or more key employees, to ensure that no more than 60% of the benefits are for key employees. If this Plan is top-heavy, then your Employer may be required to make a minimum annual contribution to this Plan, or another Employer sponsored plan, on behalf of each non-key employee employed as of Plan Year-end.



## **XI. Participant Rights**

### **I. Claims**

#### **1. Claims Procedures**

You or your Beneficiary has the right to make a claim for benefits you are entitled to under the Plan. You must submit any claim to the Plan Administrator in a form and manner acceptable to the Plan Administrator and it will be considered and subject to a full and fair review. Generally, the Plan Administrator will provide you with written notice of the disposition of your claim within 90 days after it has been filed, or, in certain circumstances, within 180 days if special circumstances require an extension of time to process the claim, and if written notice of such extension and circumstances is given to you within the initial 90-day period. In the event the claim is denied, the Plan Administrator will disclose in writing to you the specific reasons for the denial, the pertinent reference to the provisions of the Plan, a description of additional material or information required to perfect the claim and why it is required, and information about the steps that must be taken to submit a request for review. Contact your Plan Administrator for more information.

If your claim concerns disability benefits under the Plan, the Plan Administrator must notify you in writing within 45 days after you have filed your claim in order to deny it. If special circumstances require an extension of time to process your claim, the Plan Administrator must notify you before the end of the 45-day period that your claim may take up to 30 days longer to process. If special circumstances still prevent the resolution of your claim, the Plan Administrator may then only take up to another 30 days after giving you notice before the end of the original 30-day extension. If the Plan Administrator gives you notice that you need to provide additional information regarding your claim, you must do so within 45 days of that notice.

#### **2. Review Procedures**

You or your Beneficiary may generally appeal the denial of your claim within 60 days after the date which you receive notification of a denied claim. If you wish further consideration of your claim, you must file a written request for review with the Plan Administrator and include any pertinent documentation. You shall be provided, upon your request and free of charge, reasonable access to, and copies of, all documents, records, and other information relevant to your claim for benefits.

If your initial claim was for disability benefits under the Plan and has been denied by the Plan Administrator, you have 180 days from the date you receive notice of your denial in which to appeal that decision. Your review will be handled completely independently of the findings and decision made regarding your initial claim and will be processed by an individual who is not a subordinate of the individual who denied your initial claim. If your claim requires medical judgment, the individual handling your appeal will consult with a medical professional who was not consulted regarding your initial claim and who is not a subordinate of anyone consulted regarding your initial claim and identify that medical professional to you.

The Plan Administrator shall make a decision on your claim and will notify you in writing within a reasonable period of time, but not later than 60 days after receipt of your request for review, unless the Plan Administrator determines that special circumstances require an extension of time for processing the claim. If the Plan Administrator determines that an extension of time for processing is required, written notice of the extension shall be furnished to you prior to the termination of the initial 60-day period. In no event shall such extension exceed a period of 60 days from the end of the initial 60-day period. The extension notice shall indicate the special circumstances requiring an extension of time and the date by which the Plan expects to render the determination on review. The Plan Administrator shall provide you with written notification of the benefit determination on review. In the case of an adverse determination, the notification shall be set forth, in a manner calculated to be understood by you —the specific reason or reasons for the adverse determinations, reference to the specific plan provisions on which the benefit determination is based, a statement that you are entitled to receive, upon your request

and free of charge, reasonable access to, and copies of, all documents, records and other information relevant to your claim for benefits.

## **II. Statement of ERISA Rights**

As a Participant in the Plan, you are entitled to certain rights and protections under ERISA. ERISA provides that all Plan Participants shall be entitled to:

### ***Receive Information About Your Plan and Benefits.***

- Examine, without charge, at the Plan Administrator's office and at other specified locations, such as worksites and union halls, all documents governing the Plan, including insurance contracts and collective bargaining agreements, and a copy of the latest annual report (Form 5500 Series) filed by the Plan with the U.S. Department of Labor and available at the Public Disclosure Room of the Employee Benefits Security Administration.
- Obtain, upon written request to the Plan Administrator, copies of documents governing the operation of the plan, including insurance contracts and collective bargaining agreements, and copies of the latest annual report (Form 5500 Series) and updated Summary Plan Description. The Plan Administrator may make a reasonable charge for the copies.
- Receive a summary of the Plan's annual financial report. The Plan Administrator is required by law to furnish each Participant with a copy of this Summary Annual Report each year.
- Obtain a statement telling you whether you have a right to receive a benefit under the plan at normal retirement age (65) and if so, what your benefits would be at normal retirement age if you stop working under the Plan now. If you do not have a right to a benefit under the plan, the statement will tell you how many more years you have to work to get a right to a benefit. This statement must be requested in writing and is not required to be given more than once every twelve (12) months. The Plan must provide the statement free of charge.

### ***Prudent Actions by Fiduciaries.***

In addition to creating rights for Plan Participants, ERISA imposes duties upon the people who are responsible for the operation of the employee benefit plan. The people who operate your Plan, called "fiduciaries" of the Plan, have a duty to do so prudently and in the interest of you, other Plan Participants and Beneficiaries. No one, including your Employer, your union, or any other person, may fire you or otherwise discriminate against you in any way to prevent you from obtaining a retirement benefit or exercising your rights under ERISA.

### ***Enforce Your Rights .***

If your claim for a benefit under the Plan is denied or ignored, in whole or in part, you have a right to know why this was done, to obtain copies of documents relating to the decision without charge, and to appeal any denial, all within certain time schedules. Under ERISA, there are steps you can take to enforce the above rights. For instance, if you request a copy of plan documents or the latest annual report from the Plan and do not receive them within 30 days, you may file suit in a federal court. The Plan's agent for legal service of process in the event of a lawsuit is the Plan Administrator. In such a case, the court may require the Plan Administrator to provide the materials and pay you up to \$110 a day until you receive the materials, unless the materials were not sent because of reasons beyond the control of the Plan Administrator.

If you have a claim for benefits, which is denied or ignored, in whole or in part, you may file suit in a state or Federal court. In addition, if you disagree with the Plan's decision or lack thereof concerning the qualified status of a domestic relations order, you may file suit in Federal court. If it should happen that Plan fiduciaries misuse the Plan's money, or if you are discriminated against for asserting your rights, you may seek assistance from the U.S. Department of Labor, or you may file suit in a federal court. The court

will decide who should pay court costs and legal fees. If you are successful, the court may order the person you have sued to pay these costs and fees. If you lose, the court may order you to pay these costs and fees, for example, if it finds your claim frivolous.

***Assistance with Your Questions.***

If you have any questions about your Plan, you should contact the Plan Administrator. If you have any questions about this statement or your rights under ERISA, or if you need assistance in obtaining documents from the Plan Administrator, you should contact the nearest office of the Employee Benefits Security Administration, U.S. Department of Labor, listed in your telephone directory or the Division of Technical Assistance and Inquiries, Employee Benefits Security Administration, U.S. Department of Labor, 200 Constitution Avenue N.W., Washington, D.C. 20210. You may also obtain certain publications about your rights and responsibilities under ERISA by calling the publications hotline of the Employee Benefits Security Administration.

**XII. Services and Fees**

Fees and expenses charged under your Account will impact your retirement savings, and fall into three basic categories. *Investment fees* are generally assessed as a percentage of assets invested, and are deducted directly from your investment returns. Investment fees can be in the form of sales charges, loads, commissions, 12b-1 fees, or management fees. You can obtain more information about such fees from the documents (e.g., a prospectus) that describe the investments available under your Plan. *Plan administration fees* cover the day-to-day expenses of your Plan for recordkeeping, accounting, legal and trustee services, as well as additional services that may be available under your Plan, such as daily valuation, telephone response systems, internet access to plan information, retirement planning tools, and educational materials or fees for the selection of non-Fidelity funds. In some cases, these costs are covered by investment fees that are deducted directly from investment returns. In other cases, these administrative fees are either paid directly by your Employer, or are passed through to the participants in the Plan, in which case a recordkeeping fee will be deducted from your Account. *Transaction-based fees* are associated with optional services offered under your Plan, and are charged directly to your Account if you take advantage of a particular plan feature that may be available, such as a Plan loan. For more information on fees associated with your Account, refer to your quarterly Account statement, or speak with your Plan Administrator. In addition, under certain circumstances, a portion of these fees may be paid by the Investment Professional as directed by your Employer.

### **XIII. Appendix A: Investment Options**

You have the opportunity to direct the investments of your Account among the following investment options:

<b>Name</b>	<b>Code</b>	<b>Investment Objective</b>
Morgan Stanley Liquid Assets	OQHH	Seeks high current income, preservation of capital and liquidity.
Morgan Stanley Stable Value Fund - Class A	OBPN	Seeks to provide safety of principal and a competitive rate of interest that changes daily.
Fidelity Advisor Mortgage Securities Fund - Class T	0239	Seeks to provide a high level of current income.
Fidelity Advisor High Income Advantage Fund - Class T	0165	Seeks to provide a combination of a high level of income and the potential for capital gains.
Van Kampen Equity-Income Fund - Class A	OQCZ	Seeks to provide the highest possible income consistent with safety of principal. Long-term growth of capital is an important secondary objective.
Fidelity Advisor Cyclical Industries Fund - Class T	0194	Seeks capital appreciation.
Evergreen Special Values Fund - Class A	OQWO	The fund seeks to produce growth of capital.
Morgan Stanley Equally-Weighted S&P 500 Fund	OQEQ	Seeks a high level of total return on assets through a combination of capital appreciation and current income.
Fidelity Advisor Leveraged Company Stock Fund - Class T	0105	Seeks to provide capital appreciation.
Evergreen Small Cap Value A	OQXT	The fund seeks long-term growth of capital.
Fidelity Advisor Equity Growth Fund - Class T	0286	Seeks to provide capital appreciation.
Oppenheimer Capital Appreciation Fund - Class A	OQDH	Seeks to provide long-term capital growth.
AIM Capital Development Fund - Class A	OQFF	Seeks capital growth by following a long-term strategy focused on small and medium-sized companies.
Van Kampen Global Franchise Fund - Class A	OQGU	Seeks long-term capital appreciation.
Fidelity Advisor Diversified International Fund - Class T	0735	Seeks capital growth.
Fidelity Advisor Freedom 2010 Fund - Class T	1187	Seeks to provide high total return with a secondary objective of principal preservation as the fund approaches its target date and beyond.
Fidelity Advisor Freedom 2020 Fund - Class T	1192	Seeks high total return with a secondary objective of principal preservation as the fund approaches its target date and beyond.
Fidelity Advisor Freedom 2030 Fund - Class T	1197	Seeks high total return with a secondary objective of principal preservation as the fund approaches its target date and beyond.
Fidelity Advisor Freedom 2040 Fund - Class T	1203	Seeks high total return with a secondary objective of principal preservation as the fund approaches its target date and beyond.
Fidelity Advisor Freedom Income Fund - Class T	1208	Seeks high current income with a secondary objective of principal preservation.

Fidelity Advisor Freedom 2005 Fund - Class T	1294	Seeks to provide high total return with a secondary objective of principal preservation as the fund approaches its target date and beyond.
Fidelity Advisor Freedom 2015 Fund - Class T	1299	Seeks high total return with a secondary objective of principal preservation as the fund approaches its target date and beyond.
Fidelity Advisor Freedom 2025 Fund - Class T	1305	Seeks high total return with a secondary objective of principal preservation as the fund approaches its target date and beyond.
Fidelity Advisor Freedom 2035 Fund - Class T	1310	Seeks high total return with a secondary objective of principal preservation as the fund approaches its target date and beyond.

If a contribution is received for your Account and you have not supplied investment instructions to the Trustee, this contribution will be invested based on Employer direction, or absent such direction, in the most conservative investment option designated by the Employer in the Plan.

You may redirect the investment of your future contributions or exchange your existing Account balance among available investment options by calling 1-800-294-4015 on any business day between 8:30 AM (ET) and 8:00 PM (ET). This is an automated telephone service and you should follow the telephonic instructions or you can press the appropriate number if you want to talk to a Fidelity telephone representative. All representative-assisted calls will be recorded for your protection. You may call the telephone number virtually 24 hours a day, seven days a week to check Account balances, prices, yields or obtain investment information. You may also use the Internet to redirect the investment or your future contributions or exchange your existing Account balance by using Fidelity's NetBenefits. Please contact the Plan Administrator for further information.

#### **XIV. Appendix B: Special Tax Notice Regarding Plan Payments**

This notice explains how you can continue to defer federal income tax on your retirement savings or retirement Plan benefits in the CIPHERGEN Biosystems Inc. 401(k) Plan (the “Plan”) and contains important information you will need before you decide how to receive your Plan benefits.

This notice is provided to you at the request of the Plan Administrator (“the Plan Administrator”) because all or part of the payment that you will soon receive from the Plan may be eligible for rollover by you or your Plan Administrator to a traditional IRA or an eligible employer plan. A rollover is a payment by you or the Plan Administrator of all or part of your benefit to another plan or IRA that allows you to continue to postpone taxation of that benefit until it is paid to you. Your payment cannot be rolled over to a Roth IRA, a SIMPLE IRA, or a Coverdell Education Savings Account (formerly known as an education IRA). An “eligible employer plan” includes a plan qualified under section 401(a) of the Internal Revenue Code, including a 401(k) plan, profit-sharing plan, defined benefit plan, stock bonus plan, and money purchase plan; a section 403(a) annuity plan; a section 403(b) tax-sheltered annuity; and an eligible section 457(b) plan maintained by a governmental employer (governmental 457 plan).

An eligible employer plan is not legally required to accept a rollover. Before you decide to roll over your payment to another employer plan, you should find out whether the plan accepts rollovers and, if so, the types of distributions it accepts as a rollover. You should also find out about any documents that are required to be completed before the receiving plan will accept a rollover. Even if a plan accepts rollovers, it might not accept rollovers of certain types of distributions, such as after-tax amounts. If this is the case, and your distribution includes after-tax amounts, you may wish instead to roll your distribution over to a traditional IRA or split your rollover amount between the employer plan in which you will participate and a traditional IRA. If an employer plan accepts your rollover, the plan may restrict subsequent distributions of the rollover amount or may require your spouse’s consent for any subsequent distribution. A subsequent distribution from the plan that accepts your rollover may also be subject to different tax treatment than distributions from this Plan. Check with the administrator of the plan that is to receive your rollover prior to making the rollover.

If you have additional questions after reading this notice, you can contact your Plan Administrator.

#### **SUMMARY**

There are two ways you may be able to receive a Plan payment that is eligible for rollover:

- (1) Certain payments can be made directly to a traditional IRA that you establish or to an eligible employer plan that will accept it and hold it for your benefit (“DIRECT ROLLOVER”); or
- (2) The payment can be PAID TO YOU.

If you choose a **DIRECT ROLLOVER**:

- Your payment will not be taxed in the current year and no income tax will be withheld.
- You choose whether your payment will be made directly to your traditional IRA or to an eligible employer plan that accepts your rollover. Your payment cannot be rolled over to a Roth IRA, a SIMPLE IRA, or a Coverdell Education Savings Account because these are **not** traditional IRAs.
- The taxable portion of your payment will be taxed later when you take it out of the traditional IRA or the eligible employer plan. Depending on the type of plan, the later distribution may be subject to different tax treatment than it would be if you received a taxable distribution from this Plan.

If you choose to have a Plan payment that is eligible for rollover **PAID TO YOU**:

- You will receive only 80% of the taxable amount of the payment, because the Plan Administrator is required to withhold 20% of that amount and send it to the IRS as income tax withholding to be credited against your taxes.
- The taxable amount of your payment will be taxed in the current year unless you roll it over. Under limited circumstances, you may be able to use special tax rules that could reduce the tax you owe. However, if you receive the payment before age 59½, you may have to pay an additional 10% tax.
- You can roll over all or part of the payment by paying it to your traditional IRA or to an eligible employer plan that accepts your rollover within 60 days after you receive the payment. The amount rolled over will not be taxed until you take it out of the traditional IRA or the eligible employer plan.
- If you want to roll over 100% of the payment to a traditional IRA or an eligible employer plan, you must find other money to replace the 20% of the taxable portion that was withheld. If you roll over only the 80% that you received, you will be taxed on the 20% that was withheld and that is not rolled over.

***Your Right to Waive the 30-Day Notice Period .*** Generally, neither a direct rollover nor a payment can be made from the plan until at least 30 days after your receipt of this notice. Thus, after receiving this notice, you have at least 30 days to consider whether or not to have your withdrawal directly rolled over. If you do not wish to wait until this 30-day notice period ends before your election is processed, you may waive the notice period by making an affirmative election indicating whether or not you wish to make a direct rollover. Your withdrawal will then be processed in accordance with your election as soon as practical after it is received by the Plan Administrator.

## MORE INFORMATION

- I. PAYMENTS THAT CAN & CANNOT BE ROLLED OVER**
- II. DIRECT ROLLOVER**
- III. PAYMENT PAID TO YOU**
- IV. SURVIVING SPOUSES, ALTERNATE PAYEES & OTHER BENEFICIARIES**

### **I. PAYMENTS THAT CAN AND CANNOT BE ROLLED OVER**

Payments from the Plan may be “eligible rollover distributions.” This means that they can be rolled over to a traditional IRA or to an eligible employer plan that accepts rollovers. Payments from a plan cannot be rolled over to a Roth IRA, a SIMPLE IRA, or a Coverdell Education Savings Account. Your Plan Administrator should be able to tell you what portion of your payment is an eligible rollover distribution.

***After-tax Contributions.*** If you made after-tax contributions to the Plan, these contributions may be rolled into either a traditional IRA or to certain employer plans that accept rollovers of the after-tax contributions. The following rules apply:



- a) Rollover into a Traditional IRA. You can roll over your after-tax contributions to a traditional IRA either directly or indirectly. Your Plan Administrator should be able to tell you how much of your payment is the taxable portion and how much is the after-tax portion.

If you roll over after-tax contributions to a traditional IRA, it is your responsibility to keep track of, and report to the Service on the applicable forms, the amount of these after-tax contributions. This will enable the nontaxable amount of any future distributions from the traditional IRA to be determined.

Once you roll over your after-tax contributions to a traditional IRA, those amounts CANNOT later be rolled over to an employer plan.

- b) Rollover into an Employer Plan. You can roll over after-tax contributions from an employer plan that is qualified under Code section 401(a) or a section 403(a) annuity plan to another such plan using a direct rollover if the other plan provides separate accounting for amounts rolled over, including separate accounting for the after-tax employee contributions and earnings on those contributions. You can also roll over after-tax contributions from a section 403(b) tax-sheltered annuity to another section 403(b) tax-sheltered annuity using a direct rollover if the other tax-sheltered annuity provides separate accounting for amounts rolled over, including separate accounting for the after-tax employee contributions and earnings on those contributions. You CANNOT roll over after-tax contributions to a governmental 457 plan. If you want to roll over your after-tax contributions to an employer plan that accepts these rollovers, you cannot have the after-tax contributions paid to you first. You must instruct the Plan Administrator of this Plan to make a direct rollover on your behalf. Also, you cannot first roll over after-tax contributions to a traditional IRA and then roll over that amount into an employer plan.

The following types of payments cannot be rolled over:

***Payments Spread over Long Periods.*** You cannot roll over a payment if it is part of a series of equal (or almost equal) payments that are made at least once a year and that will last for:

- your lifetime (or a period measured by your life expectancy), **or**
- your lifetime and your beneficiary's lifetime (or a period measured by your joint life expectancies), **or**
- a period of 10 years or more.

***Required Minimum Payments.*** Beginning when you reach age 70½ or retire, whichever is later, a certain portion of your payment cannot be rolled over because it is a "required minimum payment" that must be paid to you. Special rules apply if you own more than 5% of your employer.

***Hardship Distributions.*** A hardship distribution cannot be rolled over.

***ESOP Dividends.*** Cash dividends paid to you on employer stock held in an employee stock ownership plan cannot be rolled over.

***Corrective Distributions.*** A distribution that is made to correct a failed nondiscrimination test or because legal limits on certain contributions were exceeded cannot be rolled over.

***Loans Treated as Distributions.*** The amount of a plan loan that becomes a taxable deemed distribution because of a default cannot be rolled over. However, a loan offset amount is eligible for rollover, as discussed in Part III below. Ask the Plan Administrator of this Plan if distribution of your loan qualifies for rollover treatment.

The Plan Administrator of this Plan should be able to tell you if your payment includes amounts which cannot be rolled over.

## **II. DIRECT ROLLOVER**

A **DIRECT ROLLOVER** is a direct payment of the amount of your Plan benefits to a traditional IRA or an eligible employer plan that will accept it. You can choose a **DIRECT ROLLOVER** of all or any portion of your payment that is an eligible rollover distribution, as described in Part I above. You are not taxed on any taxable portion of your payment for which you choose a **DIRECT ROLLOVER** until you later take it out of the traditional IRA or eligible employer plan. In addition, no income tax withholding is required for any taxable portion of your Plan benefits for which you choose a **DIRECT ROLLOVER**. This Plan might not let you choose a **DIRECT ROLLOVER** if your distributions for the year are less than \$200.

***DIRECT ROLLOVER to a Traditional IRA.*** You can open a traditional IRA to receive the direct rollover. If you choose to have your payment made directly to a traditional IRA, contact an IRA sponsor (usually a financial institution) to find out how to have your payment made in a direct rollover to a traditional IRA at that institution. If you are unsure of how to invest your money, you can temporarily establish a traditional IRA to receive the payment. However, in choosing a traditional IRA, you may wish to make sure that the traditional IRA you choose will allow you to move all or a part of your payment to another traditional IRA at a later date, without penalties or other limitations. See **IRS Publication 590, Individual Retirement Arrangements**, for more information on traditional IRAs (including limits on how often you can roll over between IRAs).

***DIRECT ROLLOVER to a Plan.*** If you are employed by a new employer that has an eligible employer plan, and you want a direct rollover to that plan, ask the plan administrator of that plan whether it will accept your rollover. An eligible employer plan is not legally required to accept a rollover. Even if your new employer's plan does not accept a rollover, you can choose a **DIRECT ROLLOVER** to a traditional IRA. If the employer plan accepts your rollover, the plan may provide restrictions on the circumstances under which you may later receive a distribution of the rollover amount or may require spousal consent to any subsequent distribution. Check with the plan administrator of that plan before making your decision.

***DIRECT ROLLOVER of a Series of Payments.*** If you receive a payment that can be rolled over to a traditional IRA or an eligible employer plan that will accept it, and it is paid in a series of payments for less than 10 years, your choice to make or not make a **DIRECT ROLLOVER** for a payment will apply to all later payments in the series until you change your election. You are free to change your election for any later payment in the series.

***Change in Tax Treatment Resulting from a DIRECT ROLLOVER.*** The tax treatment of any payment from the eligible employer plan or traditional IRA receiving your **DIRECT ROLLOVER** might be different than if you received your benefit in a taxable distribution directly from the Plan. For example, if you were born before January 1, 1936, you might be entitled to ten-year averaging or capital gain treatment, as explained below. However, if you have your benefit rolled over to a section 403(b) tax-sheltered annuity, a governmental 457 plan, or a traditional IRA in a **DIRECT ROLLOVER**, your benefit will no longer be eligible for that special treatment. See the sections below entitled "Additional 10% Tax if You Are under Age 59½" and "Special Tax Treatment if You Were Born before January 1, 1936."

## **III. PAYMENT PAID TO YOU**

If your payment can be rolled over (see Part I above) and the payment is made to you in cash, it is subject to 20% federal income tax withholding on the taxable portion (state tax withholding may also apply). The payment is taxed in the year you receive it unless, within 60 days, you roll it over to a traditional IRA or an eligible employer plan that accepts rollovers. If you do not roll it over, special tax rules may apply.

## **Income Tax Withholding:**

**Mandatory Withholding.** If any portion of your payment can be rolled over under Part I above and you do not elect to make a DIRECT ROLLOVER, the Plan is required by law to withhold 20% of the taxable amount. This amount is sent to the IRS as federal income tax withholding. For example, if you can roll over a taxable payment of \$10,000, only \$8,000 will be paid to you because the Plan must withhold \$2,000 as income tax. However, when you prepare your income tax return for the year, unless you make a rollover within 60 days (see “Sixty-Day Rollover Option” below), you must report the full \$10,000 as a taxable payment from the Plan. You must report the \$2,000 as tax withheld, and it will be credited against any income tax you owe for the year. There will be no income tax withholding if your payments for the year are less than \$200.

**Voluntary Withholding.** If any portion of your payment is taxable but cannot be rolled over under Part I above, the mandatory withholding rules described above do not apply. In this case, you may elect not to have withholding apply to that portion. If you do nothing, an amount will be taken out of this portion of your payment for federal income tax withholding. To elect out of withholding, ask the Plan Administrator for the election form and related information.

**Sixty-Day Rollover Option.** If you receive a payment that can be rolled over under Part I above, you can still decide to roll over all or part of it to a traditional IRA or to an eligible employer plan that accepts rollovers. If you decide to roll over, you must contribute the amount of the payment you received to a traditional IRA or eligible employer plan within 60 days after you receive the payment. The portion of your payment that is rolled over will not be taxed until you take it out of the traditional IRA or the eligible employer plan.

You can roll over up to 100% of your payment that can be rolled over under Part I above, including an amount equal to the 20% of the taxable portion that was withheld. If you choose to roll over 100%, you must find other money within the 60-day period to contribute to the traditional IRA or the eligible employer plan, to replace the 20% that was withheld. On the other hand, if you roll over only the 80% of the taxable portion that you received, you will be taxed on the 20% that was withheld.

**Example:** The taxable portion of your payment that can be rolled over under Part I above is \$10,000, and you choose to have it paid to you. You will receive \$8,000, **and** \$2,000 will be sent to the IRS as income tax withholding. Within 60 days after receiving the \$8,000, you may roll over the entire \$10,000 to a traditional IRA or an eligible employer plan. To do this, you roll over the \$8,000 you received from the Plan, and you will have to find \$2,000 from other sources (your savings, a loan, etc.). In this case, the entire \$10,000 is not taxed until you take it out of the traditional IRA or an eligible employer plan. If you roll over the entire \$10,000, when you file your income tax return you may get a refund of part or all of the \$2,000 withheld.

If, on the other hand, you roll over only \$8,000, the \$2,000 you did not roll over is taxed in the year it was withheld. When you file your income tax return, you may get a refund of part of the \$2,000 withheld. (However, any refund is likely to be larger if you roll over the entire \$10,000.)

**Additional 10% Tax If You Are under Age 59½.** If you receive a payment before you reach age 59½ and you do not roll it over, then, in addition to the regular income tax, you may have to pay an extra tax equal to 10% of the taxable portion of the payment. The additional 10% tax generally does not apply to (1) payments that are paid after you separate from service with your employer during or after the year you reach age 55, (2) payments that are paid because you retire due to disability, (3) payments that are paid as equal (or almost equal) payments over your life or life expectancy (or your and your beneficiary’s lives or life expectancies), (4) dividends paid with respect to stock by an employee stock ownership plan (ESOP) as described in Code section 404(k), (5) payments that are paid directly to the government to satisfy a federal tax levy, (6) payments that are paid to an alternate payee under a qualified domestic relations order, or (7) payments that do not exceed the amount of your deductible medical expenses. See **IRS Form 5329** for more information on the additional 10% tax.

The additional 10% tax will not apply to distributions from a governmental 457 plan, except to the extent the distribution is attributable to an amount you rolled over to that plan (adjusted for investment returns) from another type of eligible employer plan or IRA. Any amount rolled over from a governmental 457 plan to another type of eligible employer plan or to a traditional IRA will become subject to the additional 10% tax if it is distributed to you before you reach age 59½, unless one of the exceptions applies.

**Special Tax Treatment If You Were Born before January 1, 1936 .** If you receive a payment from a plan qualified under section 401(a) or a section 403(a) annuity plan that can be rolled over under Part I and you do not roll it over to a traditional IRA or an eligible employer plan, the payment will be taxed in the year you receive it. However, if the payment qualifies as a “lump sum distribution,” it may be eligible for special tax treatment. (See also “Employer Stock or Securities”, below.) A lump sum distribution is a payment, within one year, of your entire balance under the Plan (and certain other similar plans of the employer) that is payable to you after you have reached age 59½ or because you have separated from service with your employer (or, in the case of a self-employed individual, after you have reached age 59½ or have become disabled). For a payment to be treated as a lump sum distribution, you must have been a participant in the plan for at least five years before the year in which you received the distribution. The special tax treatment for lump sum distributions that may be available to you is described below.

**Ten-Year Averaging.** If you receive a lump sum distribution and you were born before January 1, 1936, you can make a one-time election to figure the tax on the payment by using “10-year averaging” (using 1986 tax rates). Ten-year averaging often reduces the tax you owe.

**Capital Gain Treatment.** If you receive a lump sum distribution and you were born before January 1, 1936, and you were a participant in the Plan before 1974, you may elect to have the part of your payment that is attributable to your pre-1974 participation in the Plan taxed as long-term capital gain at a rate of 20%.

There are other limits on the special tax treatment for lump sum distributions. For example, you can generally elect this special tax treatment only once in your lifetime, and the election applies to all lump sum distributions that you receive in that same year. You may not elect this special tax treatment if you rolled amounts into this Plan from a 403(b) tax-sheltered annuity contract, a governmental 457 plan, or from an IRA not originally attributable to a qualified employer plan. If you have previously rolled over a distribution from this Plan (or certain other similar plans of the employer), you cannot use this special averaging treatment for later payments from the Plan. If you roll over your payment to a traditional IRA, governmental 457 plan, or 403(b) tax-sheltered annuity, you will not be able to use special tax treatment for later payments from that IRA, plan, or annuity. Also, if you roll over only a portion of your payment to a traditional IRA, governmental 457 plan, or 403(b) tax-sheltered annuity, this special tax treatment is not available for the rest of the payment. See **IRS Form 4972** for additional information on lump sum distributions and how you elect the special tax treatment.

**Employer Stock or Securities .** There is a special rule for a payment from the Plan that includes employer stock (or other employer securities). To use this special rule, 1) the payment must qualify as a lump sum distribution, as described above, except that you do not need five years of plan participation, or 2) the employer stock included in the payment must be attributable to “after-tax” employee contributions, if any. Under this special rule, you may have the option of not paying tax on the “net unrealized appreciation” of the stock until you sell the stock. Net unrealized appreciation generally is the increase in the value of the employer stock while it was held by the Plan. For example, if employer stock was contributed to your Plan account when the stock was worth \$1,000 but the stock was worth \$1,200 when you received it, you would not have to pay tax on the \$200 increase in value until you later sold the stock.

You may instead elect not to have the special rule apply to the net unrealized appreciation. In this case, your net unrealized appreciation will be taxed in the year you receive the stock, unless you roll over the stock. The stock can be rolled over to a traditional IRA or another eligible employer plan, either in a direct rollover or a rollover that you make yourself. Generally, you will no longer be able to use the special rule for net unrealized appreciation if you roll the stock over to a traditional IRA or another eligible employer plan.

If you receive only employer stock in a payment that can be rolled over, no amount will be withheld from the payment. If you receive cash or property other than employer stock, as well as employer stock, in a payment that can be rolled over, the 20% withholding amount will be based on the entire taxable amount paid to you (including the value of the employer stock determined by excluding the net unrealized appreciation). However, the amount withheld will be limited to the cash or property (excluding employer stock) paid to you.

If you receive employer stock in a payment that qualifies as a lump sum distribution, the special tax treatment for lump sum distributions described above (such as 10-year averaging) also may apply. See IRS Form 4972 for additional information on these rules.

**Repayment of Plan Loans.** If your employment ends and you have an outstanding loan from your Plan, your employer may reduce (or “offset”) your balance in the Plan by the amount of the loan you have not repaid. The amount of your loan offset is treated as a distribution to you at the time of the offset and will be taxed unless you roll over an amount equal to the amount of your loan offset to another qualified employer plan or a traditional IRA within 60 days of the date of the offset. If the amount of your loan offset is the only amount you receive or are treated as having received, no amount will be withheld from it. If you receive other payments of cash or property from the Plan, the 20% withholding amount will be based on the entire amount paid to you, including the amount of the loan offset. The amount withheld will be limited to the amount of other cash or property paid to you (other than any employer securities). The amount of a defaulted plan loan that is a taxable deemed distribution cannot be rolled over.

#### IV. SURVIVING SPOUSES, ALTERNATE PAYEES, AND OTHER BENEFICIARIES

In general, the rules summarized above that apply to payments to employees also apply to payments to surviving spouses of employees and to spouses or former spouses who are “alternate payees.” You are an alternate payee if your interest in the Plan results from a “qualified domestic relations order,” which is an order issued by a court, usually in connection with a divorce or legal separation.

If you are a surviving spouse or an alternate payee, you may choose to have a payment that can be rolled over, as described in Part I above, paid in a DIRECT ROLLOVER to a traditional IRA or to an eligible employer plan or paid to you. If you have the payment paid to you, you can keep it or roll it over yourself to a traditional IRA or to an eligible employer plan. Thus, you have the same choices as the employee.

If you are a beneficiary other than a surviving spouse or an alternate payee, you cannot choose a direct rollover, and you cannot roll over the payment yourself.

If you are a surviving spouse, an alternate payee, or another beneficiary, your payment is generally not subject to the additional 10% tax described in Part III above, even if you are younger than age 59½.

If you are a surviving spouse, an alternate payee, or another beneficiary, you may be able to use the special tax treatment for lump sum distributions and the special rule for payments that include employer stock, as described in Part III above. If you receive a payment because of the employee’s death, you may be able to treat the payment as a lump sum distribution if the employee met the appropriate age requirements, whether or not the employee had 5 years of participation in the Plan.

#### HOW TO OBTAIN ADDITIONAL INFORMATION

This notice summarizes only the federal (not state or local) tax rules that might apply to your payment. The rules described above are complex and contain many conditions and exceptions that are not included in this notice. Therefore, you may want to consult with the Plan Administrator or a professional tax advisor before you take a payment of your benefits from your Plan. Also, you can find more specific information on the tax treatment of payments from qualified employer plans in **IRS Publication 575, Pension and Annuity Income, and IRS Publication 590, Individual Retirement Arrangements**. These publications are available from your local IRS office, on the IRS’s Internet Web Site at [www.401kxpress.com](http://www.401kxpress.com), or by calling **1-800-TAX-FORMS**.

#### VOLUME PURCHASE AGREEMENT (PURCHASER SIDE)

This Volume Purchase Agreement, including the Exhibits A and B (“**Agreement**”), effective as 13 November 2001 (“**Effective Date**”), is hereby made by and between Ciphergen Biosystems, Inc. of Fremont, California (“**Purchaser**”) and [\*\*\* Redacted] (“**Supplier**”), the **Parties**.

In consideration of the mutual promises set forth herein, the parties hereby agree as follows:

#### DEFINITIONS

“**Product/s**” shall mean “Screen printed hydrophobic coating on Ciphergen supplied substrates.”

#### SALES AND PURCHASES OF PRODUCTS.

**1. Products**. Subject to the terms and conditions of this Agreement, Supplier agrees to sell Products to Purchaser under the terms and conditions of this Agreement. For purposes of volume pricing or other terms or conditions dependent on volume, all purchases of Products by Purchaser shall be aggregated for the benefit of Purchaser.

**New Product Inclusion**. Supplier agrees to keep Purchaser informed of any new Products or improvements to existing Products. Purchaser will notify Supplier if it wishes to add a new product(s) or series of products of Supplier’s to this Agreement. Purchaser and Supplier shall then proceed to establish pricing and delivery schedules for each such new Product. Upon agreement of these items, such product(s) shall be considered Products under this Agreement, and shall be purchased and sold under the terms and conditions of this Agreement. Supplier will make all Products available to Purchaser pursuant to this section. In addition, if Supplier implements any improved technology (e.g., without limitation, improved manufacturing processes or improved or additional cores), Supplier shall promptly so advise Purchaser and, at Purchaser’s request, discuss with Purchaser the possibility and advantages of using such improved technology to redesign any Products. At Purchaser’s request, Supplier will negotiate any redesign in good faith.

#### PRICES; PAYMENT

**2. Prices**. The prices to Purchaser of the Products shall be the prices contained in the attached Exhibit B. All prices are F.O.B. origin.

**3. Taxes**. Prices stated in Exhibit B and addenda are in U.S. dollars and do not include applicable U.S. federal or state sales or use taxes

which shall be paid by Purchaser if separately indicated on the invoice for the applicable Product shipment, but do include any duties, export or import charges and the like.

**4. Payment Terms** . Supplier will invoice Purchaser with each shipment and payment terms will be the full invoiced amount payable within thirty (30) days after Purchaser receives the

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\*\*\* Confidential treatment requested pursuant to a request for confidential treatment filed with the Securities and Exchange Commission. Omitted portions have been filed separately with the Commission.

invoice and shipment (net 30).

## ORDER AND DELIVERY

**5. Purchase Orders** . Purchaser's purchase orders for Products shall be submitted to Supplier in writing or Fax. Each purchase order shall include:

- a. Identification of Products ordered;
- b. Quantity to be purchased;
- c. Price of Products ordered;
- d. Requested delivery dates;
- e. Shipping instructions.

**6. Forecasts** . Purchaser will provide Supplier with non-binding thirty (30) day forecasts of its requirements for Products on a monthly basis.

**7. Placement by Purchaser** . All purchases under this Agreement shall be subject only to the terms and conditions hereof. All references in this Agreement to purchases of, purchase orders for, or shipments of Products by or to Purchaser shall mean by or to Purchaser. In the event the terms of any purchase order, acknowledgment, invoice, confirmation or similar document conflict with or are additional to the terms of this Agreement, the terms of this Agreement alone shall apply and shall govern regardless of execution of such document by one or both parties, except that the parties may agree to negotiate non-preprinted terms which shall be effective if executed by both parties. No other terms and conditions shall apply to this Agreement or the purchase orders.

**8. Changes and Cancellations** . Purchaser shall have the right to reschedule or cancel any shipment for Products.

**9. Shipping** . All items shall be shipped in the manner specified by Purchaser or as specified in the separate Purchase Orders issued hereunder. In the event a shipment will not meet the delivery date (except as provided in Section 11), routing may be changed to premium transportation at Purchaser's request. In that event, Supplier shall bear the expense of any difference in freight costs for the premium transportation.

**10. Notice** . Supplier shall provide Purchaser with as much notice as possible if it anticipates or has reason to believe that Supplier's output of the Product will not be sufficient to meet all of Purchaser's requirements for any period. Purchaser shall provide supplier with as much notice as possible if it anticipates or has reason to believe that it will be unable to supply raw material substrate in time for Supplier to meet shipping deadlines. In the event that Purchaser is late in providing substrate, Purchaser and Supplier will agree on revised shipment dates.

**11. Discontinuance** . If production by Supplier or the availability of any Product covered by this Agreement is to be permanently discontinued at any time during the term of this agreement,

Supplier shall 1) give Purchaser at least six (6) months prior written notice of such discontinuance during which time Supplier shall accept orders from Purchaser for a reasonable quantity of such Product at the prices called for herein, 2) will grant a license to Purchaser for preparation and manufacture of Purchaser's products, such license to include all technical know-how directly related to production of Purchaser's Product, technical specifications, production methodologies, QC methodologies, formulas, where appropriate. This information will be provided with enough lead-time for Purchaser to arrange production by alternate means, so as not to interrupt the supply of finished product to Purchaser.

## **PRODUCT ACCEPTANCE AND QUALITY**

**12. Rejection** . In case any Product is not within specifications (Exhibit A attached), Purchaser will have the right, at its sole option, to reject such Product; to accept such Product with a mutually agreed adjustment in price; or to return such Product for credit or refund. If, after being requested by Purchaser, Supplier fails to promptly replace or correct any defective item, then Purchaser shall have the right, without limitation, at its sole option, without further notice, to cancel the applicable purchase order relative to the rejected material without penalty or terminate this Agreement for default in accordance with the Termination Section and require refund of any payments made relative to the rejected Purchase Order material. At Purchaser's request, Supplier will provide to Purchaser relevant information relating to the failure of any rejected Product.

**13. Packing** . Unless otherwise specified by Purchaser, Supplier will package and pack all goods in a manner that is in accordance with good commercial practice. An itemized packing list must accompany each shipment that shall include the purchase order number and quantity of the Products so shipped

## **PRODUCT SPECIFICATIONS; CHANGES**

**14. Specifications** . Supplier agrees to supply Products that conform to applicable specifications. Supplier shall not make any changes in the form, fit, function, design, performance or appearance of any Product purchased hereunder, or to any Specifications for any Product irrespective of impact on form, fit, or function, without Purchaser's prior written approval.

**18. Engineering Change Approval** . Supplier shall not make any significant changes to any manufacturing source, production process, or the controlled process parameters or sources, types or grade classifications of materials used, with respect to any Product without first obtaining from Purchaser an engineering change approval. In addition, within three (3) working days after learning of any bug or other problem in a Product which may or already has resulted in an impact to the installed customer base of such Product, and in any event no later than at the time an engineering request is made, the discovering party will notify the other of such problem, Supplier shall submit a request to make a change containing engineering data in support of the request. Within ten (10) working days of receiving such request, Purchaser shall respond to Supplier's request and shall either (i) approve the change, (ii) disapprove the change, or (iii) extend the deadline for the approval or disapproval period for an additional twenty (20) working days.



**19. Costs of Engineering Changes.** All engineering changes resulting from defects or nonconformity's in Products shall be implemented at the sole expense of Supplier, unless the defect or nonconformity is the fault of Purchaser in providing defective functional specifications or raw material substrates for Products.

## **SUPPORT**

**20. Emergency Part Shipment Procedure.** In cases of emergency, as reasonably determined by Purchaser, Supplier will ship (at Purchaser's expense) Product(s) with overnight delivery to Purchaser.

**21. Product Reports .** Supplier will keep accurate records of Product deficiencies and make such reports available to Purchaser in a timely manner.

## **REPRESENTATIONS AND WARRANTIES**

**22. Warranty of Title .** Supplier warrants and represents to Purchaser that (i) Purchaser shall acquire good and clear title to the Products, free and clear of all liens, claims, and encumbrances, (ii) all materials and services provided hereunder including, without limitation, the Products, are either owned or properly licensed by Supplier or are in the public domain and the use thereof by Purchaser, its representatives, distributors, dealers, end users, and other direct and indirect customers will not infringe any proprietary rights of any third party, (iii) Supplier has the full power to enter into this Agreement, to carry out its obligations under this Agreement and to grant the rights and licenses granted to Purchaser in this Agreement, and (iv) Supplier's compliance with the terms and conditions of this Agreement will not violate any federal, state or local laws, regulations or ordinances or any third party agreements.

**23. Product Warranty .** Supplier warrants that the Products will be new and unused, will perform in accordance with the applicable Specifications (including related documentation provided by Supplier and will achieve any function described therein) and will be free from defects in materials, workmanship or design until 24 months after acceptance by Purchaser. ( **"Warranty Period"** ).

**24. Return and Replace Procedure .** During the Warranty Period, Supplier will, at its own expense and risk, replace any defective Products and deliver new Products to the location designated by Purchaser within twenty (20) working days from the date of notice by Purchaser. Unless Supplier reasonably demonstrates a returned item is free from defect, Supplier shall pay the costs of all shipping and insurance of the defective Products. Purchaser will promptly provide evidence of defective Products to Supplier or dispose of the defective Products in accordance with Supplier's instructions.

**25. Limited Warranty .** This limited warranty does not extend to any defects caused by misuse, abuse, service by anyone other than a Supplier authorized representative, Purchaser or a party authorized by Purchaser, or damage due to accident or act of God. NO OTHER WARRANTIES ARE EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

## INDEMNIFICATION

**26. Infringement .** The Parties agree to mutually indemnify, defend and hold harmless their officers, directors, employees, shareholders, direct and indirect customers, agents, successors and assigns from and against any and all loss, damage, settlement or expense (including legal expenses), as incurred, resulting from or arising out of any claims which allege that any Products or the use or sale thereof infringe upon, misappropriate or violate any United States patents, copyrights, or trade secret rights or other proprietary rights of persons, firms or entities who are not parties to this Agreement; provided that the Parties (i) promptly notifies each other, in writing, of any notice or claim of such alleged infringement or misappropriation involving the Products of which they become aware, and (ii) mutually permit control, in a manner not adverse to either Party, the defense, settlement, adjustment or compromise of any such claim using reasonably acceptable counsel. The Parties shall not enter into any settlement that affects either Party's rights or interest without either Party's prior written approval

**27. Cure.** If by reason of such infringement claim, Purchaser or its direct or indirect customers shall be prevented or are likely to be prevented by legal means from selling or using any Products, or if, in Supplier's opinion, such claim is likely to occur, Supplier will use its best efforts, at its expense, to: (i) obtain all rights required to permit the sale or use of the Products by Purchaser and its customers; or (ii) modify or replace such Products to make them non-infringing (and extend this indemnity thereto), provided that any such replacement or modified Products are satisfactory to Purchaser. If Supplier is unable to achieve either of the options set forth above within a reasonable period of time after the issuance of an injunction, but in no event longer than thirty (30) days after receipt of notice thereof, Supplier shall promptly refund to Purchaser the invoiced purchase price, plus all shipping, storage, and associated costs, of any Products returned freight collect to Supplier which Purchaser or its customers are legally prohibited from selling or using.

**28. Product Liability Indemnification .** Supplier expressly and unequivocally agrees to and hereby does indemnify, release, defend and hold Purchaser and its officers, directors, employees, shareholders, agents, successors and assigns harmless from and against all claims, damages, losses, costs and expenses, including attorneys' fees, arising in favor of any person, firm or corporation on account of product liability in any way relating to the Product, provided that Purchaser (i) promptly notifies Supplier, in writing, of any notice or claim hereunder of which it becomes aware, and (ii) permits Supplier to control, in a manner not adverse to Purchaser, the defense, settlement, adjustment or compromise of any such claim using counsel reasonably acceptable to Purchaser. Purchaser may employ counsel, at its own expense (provided that if such counsel is necessary because of a conflict of interest of either Supplier or its counsel or because Supplier does not assume control, Supplier will bear such expense), to assist it with respect to any such claim. Supplier shall not enter into any settlement that affects Purchaser's rights or interest without Purchaser's prior written approval. Unless Supplier fails to perform its obligations pursuant to this section, Purchaser shall have no authority to settle any claim on behalf of Supplier.

## **LIMITATION OF LIABILITY**

**29.** EXCEPT FOR LIABILITY CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF A PARTY, UNDER NO CIRCUMSTANCES WILL EITHER PARTY BE LIABLE TO THE OTHER UNDER ANY CONTRACT, STRICT LIABILITY, NEGLIGENCE OR OTHER LEGAL OR EQUITABLE THEORY, FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS IN CONNECTION WITH THE SUBJECT MATTER OF THIS AGREEMENT. THIS SECTION DOES NOT LIMIT EITHER PARTY'S LIABILITY FOR BODILY INJURY OF A PERSON, DEATH, OR PHYSICAL DAMAGE TO PROPERTY.

## **TERM AND TERMINATION**

**30. Term .** Unless terminated earlier as provided herein, this Agreement shall have a term of one (1) year commencing on the Effective Date, unless terminated sooner by written notice given by a party pursuant to this Section. This Agreement shall be automatically renewed for additional successive one (1) year periods, unless written notice of non-renewal is received by the other party no later than sixty (60) days prior to the expiration of the then current term. Upon any expiration or termination, the rights and obligations of the parties shall continue except that Supplier will not be required to accept further orders or undertake further product development.

**31. Termination for Cause .** This Agreement may be terminated by a party for cause immediately by written notice upon the occurrence of any of the following events:

- a. If the other ceases to do business, or otherwise terminates its business operations; or
- b. If the other breaches any provision of this Agreement and fails to cure such breach within thirty (30) days (immediately in the case of a breach of Section 9) of written notice describing the breach; or
- c. If the other becomes insolvent or seeks protection under any bankruptcy, receivership, trust deed, creditors arrangement, composition or comparable proceeding, or if any such proceeding is instituted against the other (and not dismissed within ninety (90) days).

**32. Termination for Convenience .** Subject to the terms of this Section, Purchaser may terminate this Agreement (and some or all then outstanding Purchaser purchase orders) hereunder upon notice to Supplier. Both Purchaser and Supplier agree to cooperate in good faith to minimize the negative impact to both parties.

**33. Claims .** Any claim by Supplier on account of canceled purchase orders shall be submitted to Purchaser.

**34. Survival; Support After Termination .** Purchaser's right to distribute Products in inventory or subject to any pending purchase order shall survive termination or expiration of this Agreement.

## **COMPLIANCE WITH LAWS; IMPORT/EXPORT**

**35. Compliance with Laws .** Supplier warrants that in performance of work under this Agreement it has complied with or will comply with all applicable federal, state, local laws and

**36. Force Majeure** . Neither party shall be considered in default of performance of its obligations under this Agreement to the extent that performance of such obligations is delayed by force majeure such as fire, flood, earthquake or other acts of God beyond the reasonable control of such party or its suppliers. In the event Supplier fails to deliver product due to such causes, Purchaser may either:

- a. Terminate this Agreement or any part hereof as to Product(s) not shipped;
- b. Suspend this Agreement in whole or in part for the duration of the delaying cause, and at Purchaser's option, buy the Product(s) elsewhere and deduct from any commitment to Supplier the quantity so purchased. Supplier shall resume performance under this Agreement immediately after the delaying cause ceases and, at Purchaser's option, extend the then current term period for a period equivalent to the length of time the excused delay endured.

**37. Assignment** . This Agreement shall be binding on the parties hereto and their successors and assigns; provided, however, that Supplier shall not assign or transfer, in whole or part, this Agreement or any of its rights or obligations arising hereunder without the prior written consent of Purchaser. Any purported assignment without such consent shall be null and void. Purchaser shall not assign or transfer, in whole or part, this Agreement or any of its rights or obligations arising hereunder without the prior written consent of Supplier. Any purported assignment without such consent shall be null and void.

**38. Governing Law** . This Agreement shall be governed by the laws of the State of New York, without reference to conflict of laws principles.

**39. Independent Contractors** . Supplier shall perform its obligations hereunder as an independent contractor and shall be solely responsible for its own financial obligations. Nothing contained herein shall be construed to imply a joint venture or principal and agent relationship between the parties, and neither party shall have any right, power or authority to create any obligation, express or implied, on behalf of the other in connection with the performance hereunder.

**40. Modification** . No alteration, amendment, waiver, cancellation or any other change in any term or condition of this Agreement shall be valid or binding on either party unless the same shall have been mutually assented to in writing by both parties.

**41. Waiver** . The failure of either party to enforce at any time any of the provisions of this Agreement, or the failure to require at any time performance by the other party of any of the provisions of this Agreement, shall in no way be construed to be a present or future waiver of such provisions, nor in any way affect the right of either party to enforce each and every such provision thereafter. The express waiver by either party of any provision, condition or requirement of this Agreement shall not constitute a waiver of any future obligation to comply

with such provision, condition or requirement.

**42. Notices .** Any notice required or permitted to be given by either party under this Agreement shall be in writing and shall be personally delivered or sent by commercial courier service (e.g., DHL), or by first class mail (certified or registered), or by telecopy confirmed by first class mail (registered or certified), to the other party at its address first set forth above, or such new address as may from time to time be supplied hereunder by the parties hereto. If mailed, notices will be deemed effective three (3) working days after deposit, postage prepaid, in the mail.

**43. No Third Party Beneficiaries .** Unless otherwise expressly provided, no provisions of this Agreement are intended or shall be construed to confer upon or give to any person or entity other than Purchaser, Supplier, and Designated Third Parties any rights, remedies or other benefits under or by reason of this Agreement.

**44. Interpretation .** This Agreement represents the negotiated agreement of the parties, with the advice and assistance of counsel, and shall not be construed against either party as the drafter thereof.

**45. Entire Agreement .** This Agreement, and the exhibits hereto, represent and constitute the entire agreement between the parties, may only be amended in writing signed by both parties, and supersede all prior agreements and understandings.

**IN WITNESS WHEREOF ,** the parties hereto have executed this Agreement by persons duly authorized as of the date and year first above written.

The parties have signed below to indicate their acceptance of the terms of this Agreement.

**PURCHASER**

By: /s/ David DeNola

Name: David DeNola

Title: VP of Operations

**SUPPLIER**

By: [\*\*\* Redacted]

Name: [\*\*\* Redacted]

Title: President

\*\*\* Confidential treatment requested pursuant to a request for confidential treatment filed with the Securities and Exchange Commission. Omitted portions have been filed separately with the Commission.

## EXHIBITS INDEX

A- PRODUCT SPECIFICATIONS

B- PRICES

### EXHIBIT A.

#### PRODUCT SPECIFICATIONS

**1. Dimensions:**

**1.1 8 spot substrate:** [\*\*\* Redacted]

**16 spot substrate:** [\*\*\* Redacted]

**2. Contact Angle: over or equal [\*\*\* Redacted] for the buffer solution.**

Measure contact angle on [\*\*\* Redacted] coating using [\*\*\* Redacted] of the buffer solution [\*\*\* Redacted]

**3. Appearance:** according to coupons

**4. Pigments:**

[\*\*\* Redacted]

[\*\*\* Redacted]

[\*\*\* Redacted]

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\*\*\* Confidential treatment requested pursuant to a request for confidential treatment filed with the Securities and Exchange Commission. Omitted portions have been filed separately with the Commission.

**QC Plan for parts produced by [\*\*\* Redacted]**

**1. Definition.**

A Production lot size (N) is defined as the quantity of substrates of a single color from a printing run that can be cured in the oven at one time.

**2. The first article.**

**2.1** The first [\*\*\* Redacted] articles should be inspected to confirm all dimensions according to Ciphergen prints.

*Alignment of the mask will be confirmed prior to any run and closely monitored during any given run.*

**2.1.1 8 spot substrate:** [\*\*\* Redacted]

**2.1.2 16 spot substrate:** [\*\*\* Redacted]

**2.2** The following parameters should be measured:

**2.2.1 8 spot substrate:**

[\*\*\* Redacted]

**16 spot substrate:**

[\*\*\* Redacted]

**3. Acceptance Sampling**

An initial print of dummy substrates supplied by the Purchase should be printed and cured for testing.

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\*\*\* Confidential treatment requested pursuant to a request for confidential treatment filed with the Securities and Exchange Commission. Omitted portions have been filed separately with the Commission.

Prior to any production run, check for contact angle of the coating with [\*\*\* Redacted], supplied by the Purchaser.

- 3.1 Select randomly (n) substrates from the completed production run of (N) substrates (see the table below)
- 3.2 Measure contact angle on [\*\*\* Redacted] coating using [\*\*\* Redacted] of the buffer solution supplied by the Purchaser.
- 3.3 Acceptance criteria (X is the measured contact angle ):

N (lot size)	N (sample size)	Kcr
[*** Redacted]	[*** Redacted]	[*** Redacted]
[*** Redacted]	[*** Redacted]	[*** Redacted]
[*** Redacted]	[*** Redacted]	[*** Redacted]

[\*\*\* Redacted]

where

**The lot will be accepted if it passes inspection in pp. 2 and 3**

\*\*\* Confidential treatment requested pursuant to a request for confidential treatment filed with the Securities and Exchange Commission. Omitted portions have been filed separately with the Commission.



## EXHIBIT B

### PRODUCT PRICING

The price of [\*\*\* Redacted] shipped substrate will be charged to CIPHERGEN.

Set up charge of [\*\*\* Redacted] will be waived on any order in excess of [\*\*\* Redacted] pieces of Product that is of the same color and specification.

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\*\*\* Confidential treatment requested pursuant to a request for confidential treatment filed with the Securities and Exchange Commission. Omitted portions have been filed separately with the Commission.

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### EXHIBIT 21.1

#### SUBSIDIARIES OF THE REGISTRANT

IllumeSys Pacific, Inc.	California
CIPHERGEN Technologies, Inc.	California
CIPHERGEN Biosystems Ltd.	U.K.
CIPHERGEN Biosystems A/S	Denmark
CIPHERGEN Biosystems GmbH	Germany
CIPHERGEN Biosystems AG	Switzerland
CIPHERGEN Biosystems KK	Japan
CIPHERGEN Biosystems International, Inc.	Delaware
CIPHERGEN (Beijing) Biosystems Co., Ltd.	China
CIPHERGEN Biosystems S.r.l.	Italy
CIPHERGEN Biosystems EURL	France

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### EXHIBIT 23.1

#### CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No.333-53530) and S-8 (No.333-106434) of CIPHERGEN Biosystems, Inc. of our report dated March 21, 2005 relating to the consolidated financial statements, financial statement schedule, management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California  
March 21, 2005

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### 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 21, 2005

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

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

**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 21, 2005

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/s/ MATTHEW J. HOGAN  
Matthew J. Hogan  
*Senior Vice President and Chief Financial Officer*

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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, 2004 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 Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of CIPHERGEN Biosystems, Inc.

Date: March 21, 2005

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/s/ WILLIAM E. RICH, PH.D.  
William E. Rich, Ph.D.  
*President and Chief Executive Officer*

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/s/ MATTHEW J. HOGAN  
Matthew J. Hogan  
*Senior Vice President and Chief Financial Officer*

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