ASPIRA WOMEN'S HEALTH INC.

FORM 10-K
(Annual Report)

Filed 03/17/06 for the Period Ending 12/31/05

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Telephone	512-519-0400
CIK	0000926617
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 3/17/2006 For Period Ending 12/31/2005

Address	6611 DUMBARTON CIRCLE
	FREMONT, California 94555
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Industry	Scientific & Technical Instr.
Sector	Technology
Fiscal Year	12/31

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

(Mark One)

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

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2005

OR

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

Commission file number: 000-31617

CIPHERGEN BIOSYSTEMS, INC.

(Exact name of registrant as specified in its charter)

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

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

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

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes ☐ No ☒

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 a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the Registrant was approximately $30.0 million as of June 30, 2005, 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, 2006 was 35,998,881 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its 2006 Annual Meeting of Stockholders (the "Proxy Statement"), to be filed with the Securities and Exchange Commission, are incorporated by reference into Part III of this Form 10-K Report.

CIPHERGEN BIOSYSTEMS, INC.

FORM 10-K

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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 for purposes of the safe harbor provisions under the Private Securities Litigation Reform Act of 1995. We claim the protection of such safe harbor, and disclaim any intent or obligation to update any forward-looking statement. 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 our Biomarker Discovery Center® laboratories and secure 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 leverage our Biomarker Discovery Center laboratory operations to foster further adoption of our products and technology 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; our belief that biomarker discoveries may have diagnostic and/or therapeutic utility; our belief 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; our plan to deploy the prototypes of our latest technology and protocols to maintain and extend a technological advantage in our Biomarker Discovery Center laboratories; our plans to develop and commercialize diagnostic tests through our strategic alliance with Quest Diagnostics; our ability to comply with applicable government regulations; our ability to expand and protect our intellectual property portfolio; decreasing general and administrative costs; decreasing sales and marketing costs; decreasing research and development costs; expected stock-based compensation expense after adoption of SFAS 123(R); anticipated future losses; potential expenses associated with a product retrofit; expected levels of capital expenditures; forgiveness of loan obligations to Quest Diagnostics; the rating of our convertible notes and the value of the related put options; the period of time for which our existing financial resources, debt facilities and interest income will be sufficient to enable us to maintain current and planned operations; foreign currency exchange rate fluctuations and our plans for mitigating foreign currency exchange risks; 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”, 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.

References to "Ciphergen", the "Company", "we", "us" and "our" refer to Ciphergen Biosystems, Inc. and its subsidiaries, taken as a whole.

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® 3000 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 addition to generating revenue by providing technology and services to life science researchers, in the last several years we have discovered and filed patents on biomarkers and patterns of biomarkers that are associated with various diseases and other pathological states. Initial areas of focus have included a variety of 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 number of collaborations to assist in these discovery and validation efforts, such as with The Johns Hopkins School of Medicine, the University of Texas M.D. Anderson Cancer Center and University College London. The goal of our efforts is to develop certain of these biomarker discoveries into assays delivered on our ProteinChip platform that could be used to improve patient care. On July 22, 2005, we entered into a strategic alliance agreement with Quest

Diagnostics Incorporated ("Quest Diagnostics") covering a three year period during which the parties will strive to develop and commercialize up to three diagnostic tests based on Ciphergen's proprietary SELDI technology. Under this agreement, Quest Diagnostics will have the non-exclusive right to commercialize these tests on a worldwide basis, with exclusive commercialization rights in territories where Quest Diagnostics has a significant presence for up to five years following commercialization.

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 BioSepra S.A., a wholly-owned subsidiary of Ciphergen located near Paris, France, which is principally engaged in the development, manufacture and marketing of process chromatography sorbents, which are media used to capture and purify proteins. On November 30, 2004, we sold BioSepra S.A. and related assets to Pall Corporation.

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 components 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 types of genes expressed and 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 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. The detection of patterns of multiple proteins may prove to be 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 differences in the identities of the collection of proteins present in the samples, as well as 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. Differential expression studies and protein discovery that previously were impossible to conduct or took a long time may be performed on our ProteinChip Systems in a much shorter timeframe. 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 a shorter timeframe than typically has been experienced 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 suggest 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 our ProteinChip System can simplify assay development and speed functional validation of discovered biomarkers for both diagnostic and drug discovery applications.

- *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 more rapidly than 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. 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. We are actively pursuing the development of such diagnostic tests as a major part of our business strategy, and have established a strategic alliance with Quest Diagnostics as part of this effort.

- *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. We are actively pursuing the development of such diagnostic tests as a major part of our business strategy, and have established a strategic alliance with Quest Diagnostics as part of this effort.

- *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 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.

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:

- *Enter the Diagnostics Market with Proprietary Assays.* In the last several years, we have discovered and filed patents on biomarkers and patterns of biomarkers that are associated with various diseases and other pathological states. Initial areas of focus have included a variety of 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 number of collaborations to assist in these discovery and validation efforts, such as with The Johns Hopkins School of Medicine, the University of Texas M.D. Anderson Cancer Center and University College London. The goal of our efforts is to develop certain of these biomarker discoveries into assays delivered on our ProteinChip platform that could be used to improve patient care. On July 22, 2005, we entered into a strategic alliance agreement with Quest Diagnostics covering a three year period during which the parties will strive to develop and commercialize up to three diagnostic tests based on Ciphergen's proprietary SELDI technology. Under this agreement, Quest Diagnostics will have the non-exclusive right to commercialize these tests on a worldwide basis, with exclusive commercialization rights in territories where Quest Diagnostics has a significant presence for up to five years following commercialization.
- *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 Bayer and sanofi-aventis, 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 and Japan, and through distributors or sales representatives in selected other parts of the world, including Australia, China, Malaysia, Singapore, South Korea, Taiwan and Turkey.
- *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. Current proteomic challenges involve how to simplify the biological sample sufficiently for analysis, without losing the ability to detect the low-abundance and potentially the most important candidate proteins for disease detection in the earliest stages. In 2005, we introduced the Protein Equalizer™ bead technologies and services that allow detection of these lower-abundance proteins in complex samples.
- *Leverage Our Biomarker Discovery Center Laboratory Operations.* Both directly and through partnerships, we operate several 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, 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 The Johns Hopkins School of Medicine on ovarian and other cancers, the University of Texas M.D. Anderson Cancer Center on ovarian cancer, and University College London on ovarian and breast cancers.

- *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. 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 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 differentially 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, as well as pharmaceutical research and development. 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, which was later superseded by the *Biomek 3000 Workstation* ™. Available exclusively through Ciphergen, the customized Biomek 3000 is a device that automates liquid handling when used in combination with Ciphergen's 96-well ProteinChip Array processor. Sample throughput can be increased five-fold or more while improving reproducibility using this robotic accessory. In addition, the Biomek 3000 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 82%, 78% and 67% of revenue in 2003, 2004 and 2005, 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

One major element of Ciphergen's business strategy is the discovery of protein biomarkers and panels of biomarkers, and their development into protein molecular diagnostic tests that improve patient care. We source biomarkers with potential diagnostic utility by two means. The first is through specifically sponsored programs with selected academic collaborators, such as The Johns Hopkins School of Medicine, the University of Texas M. D. Anderson Cancer Center and University College London. The second is by

monitoring the publications and activities of a substantial number of academic ProteinChip customers with a view toward in-licensing discoveries that we deem to have diagnostic potential.

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 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, has been followed by several multi-institutional studies encompassing over 1,500 patient samples. These studies have been aimed at (1) validating biomarkers described in the August 2004 *Cancer Research* paper, (2) identifying biomarkers that could distinguish between benign and malignant pelvic masses, and (3) identifying biomarkers that could predict patient outcome. To accomplish this, Ciphergen employed its Deep Proteome™ tools and developed quantitative SELDI-based assays to specifically measure the three biomarkers identified in the *Cancer Research* paper. The results of these studies were consistent with prior studies in terms of changes to the biomarkers in the panel, and the Company discovered new potential biomarkers that may have additional diagnostic value.

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. On July 22, 2005, we entered into a strategic alliance agreement with Quest Diagnostics covering a three year period during which the parties will strive to develop and commercialize up to three diagnostic tests based on Ciphergen's proprietary SELDI technology. Under this agreement, Quest Diagnostics will have the non-exclusive right to commercialize these tests on a worldwide basis, with exclusive commercialization rights in territories where Quest Diagnostics has a significant presence for up to five years following commercialization. In addition to working through Quest Diagnostics, Ciphergen may seek to partner for commercialization purposes with traditional in vitro diagnostic companies and/or with clinical reference labs in territories where Quest Diagnostics does not have exclusive rights.

Biomarker Discovery Center Laboratories

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 University of Texas M.D. Anderson Cancer Center, University College London and other academic and government institutions, commercial biotechnology companies and pharmaceutical companies, including Bayer and sanofi-aventis. 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 we generally seek to 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. In 2003, 2004 and 2005, approximately 6%, 4% and 8% of our revenue from continuing operations, respectively, came from performing such project work. Projects for the largest single customer accounted for less than 3% of total revenue from continuing operations in each of 2003, 2004 and 2005.

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, the University of Texas M.D. Anderson Cancer Center and University College London. We spent approximately $1.2 million in 2003, $1.7 million in 2004, and $1.6 million in 2005 in the form of cash, equipment and consumables on such sponsored research.

We lease facilities and have hired managerial and scientific staff 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 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 and Japan. 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 and field research scientists, most of whom have Ph.D. degrees in biology or biochemistry. 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 some territories, 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, 2006 consisted of 72 employees, 25 of

whom have Ph.D. or M.D. degrees. As of February 28, 2006, we had 15 program managers and 14 field research scientists.

We formed Ciphergen Biosystems KK in Japan in 1999 as a joint venture with Sumitomo Corporation to distribute our products in Japan and signed a distribution and marketing agreement granting Ciphergen Biosystems KK the exclusive right to distribute our products in Japan for ten years. In March 2004, we paid $1.0 million in cash to purchase Sumitomo's remaining interest in Ciphergen Biosystems KK, bringing our ownership interest to 100%. We have also established relationships with distributors who cover Australia, China, Malaysia, Singapore, South Korea, Taiwan, Turkey and other territories.

Customers

We have a broad and diversified global life science customer base. This customer base is composed primarily of end-users and includes pharmaceutical and biotechnology companies, as well as academic users such as university laboratories, medical schools and other not-for profit research institutes and government laboratories. Our customers generally do not have a need to buy multiple systems at one time, and historically we have not depended on any single customer in the sale of our systems. No single customer accounted for 10% or more of our revenue in any of the last three fiscal years.

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 21, "Segment Information and Geographic Data."

Competition

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 Applera, the Micromass division of Waters Corporation, Amersham Biosciences, 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.

In offering proteomic research services through our Biomarker Discovery Center laboratories, we may compete with other companies offering proteomic services. We expect an increasing number of companies to provide such services in the future. If we are 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.

Research and Development

A major area of our research and development activities centers around efforts to discover and validate biomarkers and patterns of biomarkers that can be developed into diagnostic assays. We do this both through in-house programs and through collaborations we have established with The Johns Hopkins School of Medicine, the University of Texas M.D. Anderson Cancer Center and University College London, among others.

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, sample pre-treatment tools and methods, novel surface chemistries, instrumentation improvement, 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 discovery and quantitative analysis of low-abundance proteins present in complex samples such as plasma, serum and urine. 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 small prep purification on beads as well as orthogonal purification. Using these approaches, we seek to improve the speed and efficiency of designing protein separation strategies at any scale based on the predictive information obtained using our ProteinChip Systems. We believe these methods will accelerate the identification of discovered biomarkers.

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. 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.

Intellectual Property

Our intellectual property includes a portfolio of owned, co-owned or licensed patents and patent applications. As of December 31, 2005, our patent portfolio included 30 issued U.S. patents, 101 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 2019.

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, 2005, we had paid or accrued a total of approximately $2.2 million in such royalties.

We hold licenses or options to license biomarkers developed using SELDI technology, and related intellectual property. Approximately 38 of our patent applications are directed to biomarker inventions. These include applications in the areas of cancer, cardiovascular disease, infectious disease, neurodegenerative disease and women's health. We hold an exclusive license from the Johns Hopkins School of Medicine to patent applications directed to biomarkers for ovarian cancer that we intend to commercialize as an ovarian cancer diagnostic test. Other institutions and companies from which we hold such licenses or options to license include University College London (England), University of Texas M.D. Anderson Cancer Center, University of Kentucky, McGill University (Canada), Eastern Virginia Medical School, Aaron Diamond AIDS Research Center, University of Texas Medical Branch, Göteborg University (Sweden), University of Kuopio (Finland) and the Netherlands Cancer Institute (Netherlands).

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.

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. During 2005 Ciphergen enhanced its quality system in order to comply with U.S. Food and Drug Administration ("FDA") regulations, which has been reviewed through an independent audit. Ciphergen believes it is prepared to begin manufacturing in compliance with the FDA's Quality System Regulations ("QSRs") in 2006. 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 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.

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

Our future activities related to diagnostics products 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. "Active ingredients" (known as "analyte specific reagents" or "ASRs") that are sold to laboratories for use in tests developed in-house by clinical laboratories generally do not require FDA approval or clearance. 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 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. 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 we expect that revisions to FDA policies 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. 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 ("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 or the intended uses of these

products. We cannot assure 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 generally conduct a preapproval inspection for PMA 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 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 under certain 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, 2005, we had 158 full-time employees worldwide, including 72 in sales and marketing, 36 in research and development, 27 in manufacturing and 23 in administration. 48 of our employees on December 31, 2005 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 12 individuals engaged as independent contractors. None of our U.S. employees are covered by a collective bargaining agreement, though many of our European employees are covered under national labor agreements. We believe that our relations with our employees are good. Ciphergen's success will depend in large part on our ability to attract and retain skilled and experienced employees.

Available Information

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.

The transfer agent for our common stock is:

Wells Fargo Shareowner Services
161 N. Concord Exchange
South St. Paul, MN 55075
Tel: 800-468-9716
www.wellsfargo.com/com/shareowner_services

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 1A. RISK FACTORS

The reader should carefully consider each of the risks and uncertainties we describe below, as well as all of the other information in this report. The risks and uncertainties we describe below are not the only ones we face. Additional risks and uncertainties which we are currently unaware of or that we currently believe to be immaterial could also adversely affect our business.

We expect to continue to incur net losses in 2006 and 2007. 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, 2005, we have generated cumulative revenue from continuing operations of approximately $175.1 million and have incurred net losses of approximately $195.8 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, $19.8 million in 2004, and $35.4 million in 2005. 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 market the Series 4000, expand sales of our ProteinChip Systems, and develop new and improved applications for our 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 and improved applications for this platform. In particular, our success will depend on our success in marketing and growing sales of our ProteinChip System, Series 4000. If this 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 new products that are introduced.

Our products and the components used in our products are based on complex technologies and we are currently in the process of developing new versions of certain products. 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. 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 also incur additional costs associated with a product retrofit initiated by one of our suppliers for a pump used in older model ProteinChip Systems.

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 as 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, such as tests, kits and devices, will depend on several factors, including:

- our ability to convince the medical community of the safety and clinical efficacy of our products and their advantages over existing diagnostic products;
- our ability to further 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 would prevent us from generating additional revenue from diagnostic products and we could be unable to develop a profitable business.

Our ability to commercialize our potential diagnostic tests is heavily dependent on our strategic alliance with Quest Diagnostics.

On July 22, 2005, Ciphergen and Quest Diagnostics entered into a strategic alliance which will focus on commercializing up to three assays chosen from Ciphergen's pipeline over the next three years. If this strategic alliance does not continue for its full term or if Quest Diagnostics fails to proceed to diligently perform its obligations as part of the strategic alliance, such as independently developing, validating and commercializing potential diagnostics tests, our ability to commercialize our potential diagnostic tests would be seriously harmed. If we elect to increase our expenditures to fund diagnostic development programs or research programs on our own, we will need to obtain additional capital, which may not be available on acceptable terms, or at all.

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 pharmaceutical and biotechnology companies as well as academic and government research centers 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 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 may introduce in the future, new versions of our ProteinChip Systems, Arrays and Software. 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

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 together with existing debt facilities will be sufficient to meet our anticipated needs for the next 12 months. However, we may need to raise additional capital sooner in order to develop new or enhanced products or services, increase our efforts to discover biomarkers and develop them into diagnostic products, 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.

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 will affect our reported results of operations. For example, the mandated change effective for us on January 1, 2006 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 Financial Accounting Standards Board allows 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. Under the new standard, our estimate of compensation expense will require a number of complex and subjective assumptions including our stock price volatility, employee exercise patterns (expected life of the options), future forfeitures and related tax effects.

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 2005, we took steps to reduce our headcount and our voluntary employee turnover has increased from historic levels. In addition, the adoption of Statement of Financial Accounting Standards No. 123 (Revised), “Share-Based Payment”, on January 1, 2006, which will require us to expense all stock-based compensation, may require 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.

Shareholder litigation may have a negative financial impact on us and require management time and attention.

Ciphergen and certain of its current and former officers have been named as defendants in a securities class action complaint filed on December 5, 2005, in the United States District Court, Northern District of California. The complaint has been brought on behalf of all persons who purchased Ciphergen's common stock from August 8, 2005, when we issued a press release announcing unaudited financial results for the second quarter of 2005, through November 16, 2005, when we announced our intention to restate those financial results. Dealing with this matter may require considerable management time and attention, and may result in a negative financial impact on us.

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. 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 thereunder, the government has a paid-up, nonexclusive nontransferable license to those inventions and will be able in limited circumstances to grant a license to others on reasonable terms. We are not aware of any basis for the government to exercise such rights, but if circumstances change and the government exercises such rights, our business could be harmed.

If 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.

One aspect of our business plan is to develop 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 University College London. 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 those 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.

We have drawn funds from the $10 million secured line of credit provided by Quest Diagnostics. If we fail to achieve the loan forgiveness milestones set forth therein, we will be responsible for full repayment of the loan.

In connection with the strategic alliance with Quest Diagnostics, Quest Diagnostics agreed to provide us with a $10 million secured line of credit, from which we had drawn a total of $2.5 million as of December 31, 2005. Borrowings may be made in monthly increments of up to approximately $417,000 over a two year period, with accrued interest to be paid monthly. Funds from this collateralized line of credit may only be used to pay certain costs and expenses directly related to the strategic alliance, with forgiveness of the repayment obligations based upon our achievement of milestones related to the development, regulatory approval and commercialization of laboratory tests. Should we fail to achieve these milestones, we would be responsible for the repayment of the outstanding principal amount of any such loans on or before July 22, 2010.

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. If a third party were to assert claims that we are violating their patents, we might 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.

We may incur additional costs due to recalls made by our suppliers of parts integrated into some of our products.

In July 2005, we were notified by a supplier about a potential safety hazard in certain pumps used in some older model ProteinChip Systems. This product recall does not affect our current Series 4000 line. To remedy the potential safety hazard, the supplier is recommending that a capacitor in the pumps it supplied be replaced, and is making the requisite parts available to us at no cost. While we believe this component part retrofit can be easily performed by our customers, or that Ciphergen personnel can perform the work during regularly scheduled service calls, unexpected difficulties with this product retrofit or possibly other unanticipated product recalls in the future by our suppliers could result in additional costs and decrease our gross profit. Additionally, such events could cause disruptions to our customers and harm Ciphergen's reputation.

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 3000 Workstation, with Salford Systems with respect to selling Biomarker Patterns software, and with Applied Biosystems / MDS Sciex with respect to selling our ProteinChip Tandem MS Interfaces. If we fail to maintain or extend after their expiration the underlying agreements with these companies, we would have to stop selling these particular products and may have to seek alternate products to sell, as a result of which our sales may be harmed.

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

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

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

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. "Active ingredients" (known as "analyte specific reagents" or "ASRs") that are sold to laboratories for use in tests developed in-house by

clinical laboratories are generally 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 we expect that revisions to FDA policies 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 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 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 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 maintain our operations in line with FDA QSR requirements. 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 fire, natural disasters, computer viruses, human error, power shortages, telecommunication failures, international acts of terror and similar events. Our only production facility is located in Fremont, California, where we also have laboratories. 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.

Legislative actions resulting in higher compliance costs are likely to adversely impact our future financial position, cash flows 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 undertook significant efforts and incurred great expense 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.

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 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 BioSepra 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;
- potential impairment of goodwill;
- 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 international, federal, state and local environmental laws and regulations that govern our operations, including the handling and disposal of nonhazardous and hazardous wastes, the recycling and treatment of electrical and electronic equipment, 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.

Because we do not intend to pay dividends, our stockholders will benefit from an investment in our common stock only if it appreciates in value.

We have never declared or paid any cash dividends on our common stock. We currently intend to retain our future earnings, if any, to finance the expansion of our business and do not expect to pay any cash dividends in the foreseeable future. As a result, the success of an investment in our common stock will depend entirely upon any future appreciation. There is no guarantee that our common stock will appreciate in value or even maintain the price at which our investor purchased his shares.

Risks Related to Our Convertible Senior Notes and Common Stock

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

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

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

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

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

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

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

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

Neither we nor our subsidiaries are restricted from incurring additional debt, including senior debt, or liabilities under the indenture. In addition, the indenture does not restrict us or any of our subsidiaries from paying dividends or issuing or repurchasing securities. If we or our subsidiaries were to incur additional debt or liabilities, our ability to pay our obligations on the notes could be adversely affected.

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

At maturity, the entire outstanding principal amount of the notes will become due and payable by us. Upon a change in control, as defined in the indenture, note holders may require us to repurchase all or a portion of their notes. We may not have enough funds or be able to arrange for additional financing to pay the principal at maturity or to repurchase the notes on a change in control. Future credit agreements or other agreements relating to our indebtedness may restrict the redemption or repurchase of the notes and provide that a change in control constitutes an event of default. If the maturity date or a change in control occurs at a time when we are prohibited from repaying or repurchasing the notes, we could seek the consent of our lenders to purchase the notes or we could attempt to refinance this debt. If we do not obtain the necessary consents or cannot refinance the debt on favorable terms, or at all, we will be unable to repay or repurchase the notes. Our failure to repay the notes at maturity or repurchase tendered notes would

constitute an event of default under the indenture, which might constitute a default under the terms of our other debt. Our obligation to offer to purchase the notes upon a change in control would not necessarily afford note holders protection in the event of a highly leveraged transaction, reorganization, merger or similar transaction involving us.

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

There is no guarantee that an active trading market for our common stock will be maintained on the Nasdaq Stock Market's National Market. Investors may not be able to sell their shares quickly or at the latest market price if trading in our stock is not active. An active trading market for the notes may not be maintained. If an active market for the notes is not sustained, the trading price of the notes could decline significantly. The notes are eligible for trading on the PORTAL 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, 2005, we had:

- 35,998,881 shares of common stock outstanding;
- 6,333,504 shares of common stock reserved for issuance upon exercise of options outstanding under our stock option plans with a weighted average exercise price of $4.46 per share;
- in addition to the shares reserved for issuance upon the exercise of options referred to in the preceding bullet point, 425,797 shares reserved for future issuance under our stock option and employee stock purchase plans;
- a warrant outstanding for 2,200,000 shares of common stock at a purchase price of $3.50 per share; and
- 25,000 shares of common stock potentially issuable to Gail Page, President and Chief Executive Officer of Ciphergen, contingent upon the achievement of a specific diagnostic milestone.

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 1B. UNRESOLVED STAFF COMMENTS

None.

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	Primary Functions	Lease Expiration Date
Fremont, California	61,000 sq. ft.	Research and development laboratories, Biomarker Discovery Center laboratory, manufacturing facility, marketing, sales and administrative offices	2008
Fresno, California	1,000 sq. ft.	Research and development laboratory	May 2006
Galveston, Texas	500 sq. ft.	Sales demonstration laboratory	2007
Malvern, Pennsylvania	4,500 sq. ft.	Biomarker Discovery Center laboratory	2010
Copenhagen, Denmark	2,000 sq. ft.	Biomarker Discovery Center laboratory, sales office	2009
Berlin, Germany	3,200 sq. ft.	Sales demonstration laboratory	2010
Guildford, England	3,700 sq. ft.	Sales office and demonstration laboratory	2010
Osaka, Japan	600 sq. ft.	Sales office	March 2006
Yokohama, Japan	8,000 sq. ft.	Biomarker Discovery Center laboratory, sales, service and administrative office	August 2006, and 2007

We are actively reviewing all of our space needs with a view to reducing our overall facilities expenses. Actions we may take include not renewing certain leases upon their expiration as well as seeking to sublease space to others.

ITEM 3. LEGAL PROCEEDINGS

Ciphergen and certain of its current and former officers have been named as defendants in a securities class action complaint filed on December 5, 2005, in the United States District Court, Northern District of California (Docket No. C 05 4997 MHP). The complaint has been brought on behalf of all persons who purchased Ciphergen's common stock from August 8, 2005, when we issued a press release announcing unaudited financial results for the second quarter of 2005, through November 16, 2005, when we announced our intention to restate those financial results. The Plaintiffs do not demand any particular amount in damages. We have not yet responded to this complaint. Given the early stage of this action, Ciphergen cannot predict the ultimate outcome of this matter at this time.

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

There were no matters submitted to a vote of security holders during the fourth quarter of 2005.

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 symbols "CIPH" and "CIPHE" since the effective date of our initial public offering 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, 2006 was $1.75 per share. The following table sets forth the high and low sales prices per share of our common stock as reported on the Nasdaq National Market for the periods indicated.

	Sale Price	
	High	Low
Fiscal 2004:		
First quarter	$ 11.68	$ 7.50
Second quarter	9.45	6.09
Third quarter	6.00	2.61
Fourth quarter	4.71	3.05
Fiscal 2005:		
First quarter	4.34	2.62
Second quarter	2.81	1.39
Third quarter	2.65	1.67
Fourth quarter	1.99	0.64

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, 2006, there were 35,998,881 shares of our common stock issued and outstanding and held by approximately 144 holders of record. There are approximately 4,000 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 105.0% of the principal balance upon a change in control of Ciphergen. 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 were 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

On July 22, 2005, pursuant to a stock purchase agreement, Ciphergen sold Quest Diagnostics Incorporated ("Quest Diagnostics") 6,225,000 shares of Ciphergen's common stock, or approximately 17.4% of shares outstanding after the transaction, for an aggregate purchase price of $15,000,000 and issued Quest Diagnostics a warrant to purchase up to 2,200,000 shares of Ciphergen's common stock at an exercise price of $3.50 per share, subject to certain adjustments. While the warrant issued to Quest Diagnostics is exercisable at any time, Ciphergen and Quest Diagnostics later clarified that the total number of shares of common stock purchased pursuant to such transaction and issuable upon exercise of the warrant would at no time exceed 19.9% of the total number of outstanding shares of Ciphergen common stock (provided that Quest Diagnostics may, prior to or concurrently with the exercise of their warrant, sell such number of shares of Ciphergen common stock that, after the exercise of the warrant and such sale of shares, Quest Diagnostics would not own more than 19.9% of Ciphergen's common stock). This warrant is exercisable at any time prior to July 22, 2010. The proceeds received by Ciphergen from the sale of the common stock or upon any exercise of the warrant will be used for working capital and general corporate purposes. The securities offered, issued and sold pursuant to this financing will not be registered under the Securities Act of 1933, as amended, by reason of an exemption from the registration requirements under Section 4(2) and/or Rule 506 of Regulation D of the Securities Act, and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. Pursuant to the terms of the stock purchase agreement, we were able to rely upon the representations and warranties provided by Quest Diagnostics contained therein in connection with the issuance of the shares of common stock and the warrants without registration. Pursuant to the stock purchase agreement, we also provided certain registration rights to Quest Diagnostics whereby they may demand that we subsequently register their shares under the Securities Act or, if we file another registration statement under the Securities Act, Quest Diagnostics may elect to include their shares in that

registration, subject to various conditions. This stock sale and the issuance of the warrant 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 operates in successive 6-month offering and purchase 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, 2005.

Equity Compensation Plan Table

Plan Category	Number of Shares of Common Stock to be Issued Upon Exercise of Outstanding Options and Rights	Weighted-Average Exercise Price of Outstanding Options and Rights	Number of Shares of Common Stock Remaining Available for Future Issuance Under Equity Compensation Plans (excluding shares reflected in the first column)
Equity compensation plans approved by security holders	6,374,983(1)	$ 4.44	425,797(2)
Equity compensation plans not approved by security holders	—	—	—
Total	6,374,983	$ 4.44	425,797

(1) Includes outstanding stock options for 812,035 shares under the 1993 Plan and 5,521,469 shares under the 2000 Plan. Also includes 41,479 shares after giving effect to estimated purchases under the ESPP for the purchase period that will end on May 1, 2006 based on participant contributions through December 31, 2005.

(2) Includes 259,299 shares for the 2000 Plan. On January 1 of each year during the term of the 2000 Plan, the total number of shares available for award purposes under the 2000 Plan will increase by the lesser of (i) 2,150,000 shares, (ii) 5% of the outstanding shares of common stock on the last day of the immediately preceding fiscal year, or (iii) an amount determined by the Board. The aggregate number of shares available for issuance under the 2000 Plan increased by 1,300,000 shares on January 1, 2006. The data presented in this table was calculated as of December 31, 2005 and does not reflect the January 1, 2006 increase. Also includes 166,498 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 170,000 shares on January 1, 2006 and is not included in the table above.

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. Historical results are not necessarily indicative of the results to be expected in the future. On November 30, 2004 we completed the sale of our BioSepra business. Accordingly, the information set forth in the table below has been restated to reflect the BioSepra business as a discontinued operation.

	Years Ended December 31,				
	2005	2004	2003	2002	2001
	(in thousands, except per share data)				
Statement of Operations Data:					
Revenue:					
Products	$ 18,350	$ 31,378	$ 35,872	$ 23,572	$ 13,370
Products revenue from related parties	—	—	—	827	1,192
Services	8,896	8,803	7,766	4,809	1,794
Total revenue	27,246	40,181	43,638	29,208	16,356
Cost of revenue:					
Products	9,372	11,199	11,911	6,761	4,216
Products revenue from related parties	—	—	—	334	434
Services	4,321	3,876	3,426	2,277	628
Litigation settlement	—	—	7,257	—	—
Total cost of revenue	13,693	15,075	22,594	9,372	5,278
Gross profit	13,553	25,106	21,044	19,836	11,078
Operating expenses:					
Research and development	13,196	19,268	23,628	19,593	12,428
Sales and marketing	18,009	26,019	21,255	17,960	13,552
General and administrative	14,404	14,136	14,815	14,422	12,925
Amortization of intangible assets	—	—	—	—	152
Goodwill impairment	2,453	—	—	—	—
Total operating expenses	48,062	59,423	59,698	51,975	39,057
Loss from operations	(34,509)	(34,317)	(38,654)	(32,139)	(27,979)
Interest and other income (expense), net	(1,871)	(2,145)	(211)	1,435	3,278
Loss from continuing operations before income taxes	(36,380)	(36,462)	(38,865)	(30,704)	(24,701)
Income tax provision (benefit) from continuing operations	7	109	(47)	(44)	140
Net loss from continuing operations	(36,387)	(36,571)	(38,818)	(30,660)	(24,841)
Discontinued operations:					
Income (loss) from discontinued operations, net of tax	—	(1,797)	2,071	1,588	(971)
Gain from sale of BioSepra business, net of tax	954	18,527	—	—	—
Net income (loss) from discontinued operations	954	16,730	2,071	1,588	(971)
Net loss	$ (35,433)	$ (19,841)	$ (36,747)	$ (29,072)	$ (25,812)
Basic and diluted net loss per share:					
Net loss per share from continuing operations	$ (1.13)	$ (1.25)	$ (1.38)	$ (1.14)	$ (0.94)
Net income (loss) per share from discontinued operations	0.03	0.57	0.07	0.06	(0.03)
Net loss per share	$ (1.10)	$ (0.68)	$ (1.31)	$ (1.08)	$ (0.97)
Weighted average shares used in computing basic and diluted net loss per share	32,321	29,244	28,154	26,965	26,512

	As of December 31,				
	2005	2004	2003	2002	2001
	(in thousands)				
Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$ 27,978	$ 37,567	$ 47,316	$ 42,541	$ 77,124
Working capital	27,130	39,932	51,970	47,667	70,890
Total assets	52,811	74,377	102,026	87,615	106,816
Long-term debt and capital lease obligations, including current portion	31,512	29,397	31,865	2,816	2,610
Total stockholders' equity	6,523	26,715	47,892	68,354	93,229

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 latest 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 BioSepra® process chromatography business from Invitrogen Corporation; this business was subsequently sold to Pall Corporation on November 30, 2004.

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 BioSepra 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 increased our efforts to discover and commercialize 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, 2005, we had an accumulated deficit of $195.8 million.

Our sales are currently driven by the need for new and better tools to perform protein discovery, characterization, purification, identification and assay development. Many of the ProteinChip Systems sold to our customers also generate a recurring revenue stream from the sale of consumables and maintenance contracts. In addition, some of our customers later enhance their ProteinChip Systems by adding our automation accessories and advanced software.

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 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 efforts. 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 July 22, 2005, we entered into a strategic alliance agreement with Quest Diagnostics covering a three year period during which the parties will strive to develop and commercialize up to three diagnostic tests based on Ciphergen's proprietary SELDI ProteinChip technology. Pursuant to the agreement, Quest Diagnostics will have the non-exclusive right to commercialize these tests on a worldwide basis, with exclusive commercialization rights in territories where Quest Diagnostics has a significant presence for up to five years following commercialization. As part of the strategic alliance, there is a royalty arrangement under which Quest Diagnostics will pay royalties to Ciphergen based on fees earned by Quest Diagnostics for applicable diagnostics services, and Ciphergen will pay royalties to Quest Diagnostics based on Ciphergen's revenue from applicable diagnostics products. To date, no such royalties have been earned by either party. Quest Diagnostics and Ciphergen have also entered into a supply agreement under which Ciphergen will sell instruments and consumable supplies to Quest Diagnostics to be used for performing diagnostics services. In addition, for an aggregate purchase price of $15 million, Quest Diagnostics has purchased 6,225,000 shares of Ciphergen's common stock, or approximately 17.4% of shares outstanding after the transaction, and a warrant having a term of five years to purchase up to an additional 2,200,000 shares for $3.50 per share. The warrant was valued at approximately $2.2 million based on the fair value as determined by a Black-Scholes model using the following assumptions: risk-free interest rate, 4.04%; expected life, 5 years; expected volatility 69%. Quest Diagnostics has also agreed to loan Ciphergen up to $10 million with interest accrued at the prime rate plus 0.5% and paid monthly, solely to fund certain

development activities related to the strategic alliance. Borrowings may be made by Ciphergen in monthly increments of up to approximately $417,000 on the last day of each month during the first two years of the strategic alliance, and at December 31, 2005, such borrowings amounted to $2.5 million. This loan, collateralized by certain intellectual property of Ciphergen, will be forgiven based on Ciphergen's achievement of certain milestones related to development, regulatory approval and commercialization of certain diagnostic tests. Should the Company fail to achieve these milestones, the outstanding principal amount of any such loans will become due and payable on July 22, 2010. From the inception of the strategic alliance through December 31, 2005, we have spent approximately $2.2 million of the loan proceeds on in-house research and development, as well as collaborations with others, directed towards achieving the milestones. Spending for this purpose is expected to continue and to increase, partly as a result of the additional expenses associated with the collaboration with University College London et al. described below.

On October 3, 2005, we entered into a two year research and license agreement with University College London and UCL BioMedica Plc. (together, "UCL") to utilize Ciphergen's suite of proteomic solutions (Deep Proteome™, Pattern Track™ Process and ProteinChip® System) to further UCL's ongoing research in ovarian cancer and breast cancer. Under the terms of the agreement, Ciphergen has exclusive rights to license intellectual property resulting from discoveries made during the course of this collaboration for use in developing, manufacturing and selling products and services utilizing the intellectual property. Additionally, Ciphergen will contribute approximately $2.1 million in cash and $652,000 in the form of Ciphergen equipment, software, arrays and consumable supplies as requested by UCL, valued at Ciphergen's list selling price, to cover part of the costs incurred by UCL specifically for this research program. $1.1 million of the cash obligation is to be paid in the first year of the agreement and is non-cancelable. The remainder is to be paid in the second year of the agreement and is cancelable with three months advance notice. As of December 31, 2005, we had expensed $306,000, of which $33,000 represented our cost for the arrays and consumables we had provided, and the remaining $273,000 was recorded as an accrued liability.

On December 20, 2005, Ciphergen's Board of Directors approved the accelerated vesting of all unvested and "out-of-the-money" stock options held by employees with an exercise price per share of $4.00 or higher. The accelerated vesting caused options previously awarded for the purchase of approximately 1,035,000 shares of Ciphergen's common stock, representing approximately 16% of total options outstanding, to vest and become exercisable immediately, subject to continued restrictions on sale. Of the 224 option grants subject to accelerated vesting, 27 are held by executive officers. Under APB No. 25 and FASB Interpretation No. 44, "Accounting for Certain Transactions Involving Stock Compensation" , the acceleration of the vesting of these options did not result in a compensation charge because the exercise prices of the affected options was greater than the closing price of our common stock on December 20, 2005. The decision to accelerate the vesting of these options was made primarily to reduce non-cash compensation expense that would have been recorded in Ciphergen's income statement in future periods upon the adoption of SFAS 123(R) beginning in January 2006. As a result of this acceleration, we expect to reduce the stock option expense we would otherwise be required to record by approximately $2.2 million, which is included in the pro forma calculation of net income under SFAS 123 included in note 1 of the Notes to Consolidated Financial Statements. Approximately $0.9 million of the $2.2 million would have related to 2006. The Board of Directors believes the accelerated vesting of these options to be in the best interest of our shareholders and employees.

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 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 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; demonstration equipment, 2 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 acquisitions of IllumeSys Pacific, Inc. in 1997, Ciphergen Technologies, Inc. in 1998 and BioSepra S.A. in 2001, and the increases in our ownership of Ciphergen Biosystems KK in 2002 and 2004. The goodwill related to BioSepra was written off against the gain on the sale of the BioSepra 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 annual impairment tests through 2004 and determined that no impairment had occurred. We performed an annual impairment test in 2005 and determined that goodwill of $2.5 million associated with our Japanese subsidiary had been impaired. (See note 6, "Purchase of Additional Ownership Interest in Ciphergen Biosystems KK", and note 8, "Goodwill and Other Intangible Assets", in the Notes to Consolidated Financial Statements.) 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, timing of collection and payment of various items, working capital levels, future growth rates and profit margins, 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, 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.

In December 2004, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards ("SFAS") No. 123 (Revised), "Share-Based Payment." This new standard requires the expensing of all stock-based compensation. Under the new standard, our estimate of compensation expense will require a number of complex and subjective assumptions including our stock price volatility, employee exercise patterns (expected life of the options), future forfeitures and related tax effects. SFAS No. 123(R) will be effective for us beginning in the first quarter of fiscal 2006. Management expects that we will use the modified prospective application method and that we will recognize stock-based compensation expense on a straight-line basis over the vesting periods of the awards. The amount of stock-based compensation we record will depend on a number of factors, including the amount of awards granted and the fair value of those awards at the time of grant.

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, 2005, 2004 and 2003

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

Revenue

Product revenue was $18.4 million in 2005, $31.4 million in 2004, and $35.9 million in 2003. The $13.0 million or 42% decrease in product revenue from 2004 to 2005 was largely the result of a 54% decrease in revenue from sales of our ProteinChip Systems, accessories and software, as well as a 14% decrease in revenue from our arrays and consumables. The decrease in systems and related revenue was due to a 41% decrease in unit sales of ProteinChip Systems and a 22% decrease in average revenue per system sold due to increased discounting and incentives we offered to expedite orders, discounts offered to customers on trade ins of their older model ProteinChip Systems for a new Series 4000, and the competitive environment. The decrease in array and consumable sales was largely driven by lower unit sales due in part to fewer new instrument placements, which typically include a significant initial purchase of consumables. In Japan, we price our products in Japanese yen, and the strengthening of the U.S. dollar against the Japanese yen resulted in a decrease in product revenue of approximately $370,000.

In the third quarter of 2005, we sold nine ProteinChip Systems to one customer for $601,000. We also entered into a product development agreement with this same customer, whereby the customer will develop for us a specific new product and we may pay the customer up to $500,000 based on the customer's attainment of specified development milestones. Under this agreement, Ciphergen paid this customer $300,000 of development fees during 2005. This was recorded, following EITF 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)", as a reduction to revenue, resulting in net revenue from this customer of approximately $301,000 in 2005. This constituted approximately 2% of products revenue and 1% of total revenue for 2005. In future periods, if this third party achieves a development milestone, Ciphergen will record its payment obligation as a reduction to revenue in the period in which that development milestone is met.

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 compared to its predecessor model, 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.

Service revenue was $8.9 million in 2005, $8.8 million in 2004, and $7.8 million in 2003. The $93,000 or 1% increase in service revenue from 2004 to 2005 was primarily due to a $313,000 increase in revenue from collaboration services handled through our Biomarker Discovery Center laboratories due to the completion of several large contracts in 2005, and from a $97,000 increase in revenue from maintenance contracts, driven by growth in our installed base. However, revenue from training and consulting services decreased $317,000 primarily due to fewer new instrument placements, which typically include an initial registration for one or more training classes.

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.

We expect that future revenues for our business will be affected by, among other things, our ability to develop and commercialize diagnostic tests based on the ProteinChip platform, demand for our ProteinChip Systems and Arrays, the degree of acceptance by the market of our Series 4000 platform, the level of continuing purchases of arrays by existing customers, new product and application introductions, customer budgets, competitive conditions and government funding for research in our field.

Cost of Revenue

Cost of product revenue was $9.4 million in 2005, $11.2 million in 2004, and $11.9 million in 2003. The $1.8 million or 16% decrease in cost of product revenue from 2004 to 2005 resulted from a decrease in unit sales of our ProteinChip Systems, accessories, software, arrays and other consumables, as well as a $1.1 million decrease in the provision for excess and obsolete inventories in 2005 compared to 2004. We introduced our current Series 4000 platform in 2004 and concurrently increased inventory reserves for older products. These decreases were partially offset by higher costs of materials recorded in 2005, compared to 2004 when a portion of sales included instruments with components previously charged to research and development. The gross margin for product revenue decreased from 64% in 2004 to 49% in 2005. The decrease in gross margin for product revenue was largely due to lower gross margins for arrays and consumables resulting from lower production volumes in 2005 compared to 2004, thus spreading our fixed manufacturing overhead costs over fewer units produced and eroding gross margin on products revenue by approximately 12% of products revenue. The decrease in gross margin from 2004 to 2005 was also due to lower gross margins for ProteinChip Systems as a result of increased discounting.

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 discounted our remaining stock of older model ProteinChip Systems. 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 sales of the ProteinChip System, 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.

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 $0 in 2005, $45,000 in 2004, and $81,000 in 2003.

Cost of service revenue was $4.3 million in 2005, $3.9 million in 2004, and $3.4 million in 2003. From 2004 to 2005, cost of service revenue increased $445,000 or 11% primarily due to increased costs associated with paid projects performed by our Biomarker Discovery Center laboratories and customer training. The gross margin for service revenue decreased from 56% in 2004 to 51% in 2005 mainly due to lower gross margins realized on Biomarker Discovery Center contracts, which have costs that typically vary based on

the complexity and difficulty of the work being undertaken, and lower gross margins on our training services.

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.

We believe that gross profit as a percentage of revenue in future periods will be affected by, among other things, sales volumes, competitive conditions, discounts offered, inventory reserve levels and the amount of scrap and rework we incur in our manufacturing processes.

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, 2005, we paid or accrued a total of $2.2 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 both 2004 and 2005, and the remaining $10.2 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 $13.2 million in 2005, $19.3 million in 2004, and $23.6 million in 2003. From 2004 to 2005, research and development expenses decreased $6.1 million or 32% primarily due to a decrease of $2.2 million in salaries, payroll taxes and employee benefits due to a 39% decline in research and development staff. Materials and supplies used in the development of new products also decreased by $1.9 million and consulting fees decreased by $1.0 million, consistent with the scaling back of research programs related to our instrument platform. Spending on diagnostics research under the strategic alliance with Quest Diagnostics was approximately $2.2 million in 2005 during the first five months of the alliance.

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 that could potentially be developed into diagnostic products. In addition, stock-based compensation expense declined $150,000.

Stock-based compensation expense in research and development expenses was $0 in 2005, $37,000 in 2004, and $187,000 in 2003.

We expect research and development expenses to decline in 2006 relative to 2005 due to having fewer research and development employees in 2006 as well as slowing or canceling selected early-stage research and development programs related to new instrumentation platforms as part of our efforts to control expenses, partially offset by an increase in our research and development activities associated with developing and commercializing diagnostic tests as part of our strategic alliance with Quest Diagnostics, and discovering biomarkers that could potentially be developed into additional diagnostic products.

Sales and Marketing

Sales and marketing expenses were $18.0 million in 2005, $26.0 million in 2004, and $21.3 million in 2003. From 2004 to 2005, sales and marketing expenses decreased $8.0 million or 31%, largely due to lower payroll-related costs as a result of a 40% decrease in the sales and marketing staff thereby decreasing payroll and related costs approximately $4.1 million. The reduction in our sales force also resulted in a $1.6 million decrease in travel expenses and a $559,000 decrease in ProteinChip Arrays and lab supplies used for customer demonstrations. The cost of advertising, trade shows and other promotional activities declined by approximately $1.2 million; such expenses were unusually high in 2004 due to the launch of our Series 4000 ProteinChip System that year.

From 2003 to 2004, sales and marketing expenses increased $4.8 million or 22%, 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 efforts which began 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.

Stock-based compensation expense in sales and marketing expenses was $0 in 2005, $93,000 in 2004, and $274,000 in 2003.

We expect sales and marketing expenses to decrease in 2006 relative to 2005 as a result of a smaller sales force and reduced associated selling expenses.

General and Administrative

General and administrative expenses were $14.4 million in 2005, $14.1 million in 2004, and $14.8 million in 2003. From 2004 to 2005, general and administrative expenses increased $268,000 or 2%, largely driven by $679,000 in severance costs for two former executives, partly offset by a $142,000 reduction in payroll and related costs resulting from a 32% reduction in administrative staff which occurred in the second half of 2005. Outside professional fees increased approximately $429,000 as a result of work done to assist us with our restatement of our second quarter 2005 financial statements. Other audit and accounting fees increased $321,000, largely the result of efforts to comply with Section 404 of the Sarbanes-Oxley Act of 2002. These increases were partially offset by decreases of $427,000 in stock-based compensation expense, $249,000 in costs of temporary help, $165,000 in travel expenses and $124,000 in the provision for bad debts.

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 new diagnostics efforts which begin 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.

Stock-based compensation expense in general and administrative expenses was $0 in 2005, $427,000 in 2004, and $876,000 in 2003.

We expect general and administrative expenses to decrease in 2006 relative to 2005 due to lower headcount in administrative functions and because certain large expenses incurred in 2005, such as severance payments to former executives and outside professional fees related to the restatement of our financial results for the second quarter of 2005, are not expected to recur. In addition, we expect our costs related to compliance with Section 404 of the Sarbanes-Oxley Act of 2002 to decrease significantly as we are now deemed a non-accelerated filer no longer required to comply with Section 404. However, these reductions are expected to be partly offset by normal salary increases and additional legal fees related to the securities class action complaint. (See Item 3—Legal Proceedings.)

Goodwill Impairment

We recorded goodwill principally as a result of our acquisition of BioSepra in 2001, the increases in our ownership of Ciphergen Biosystems KK in 2002 and 2004, and the acquisitions of Ciphergen Technologies, Inc. and IllumeSys Pacific, Inc. in 1997 and 1998. We performed annual impairment tests from 2002 through 2004 and determined that no impairment had occurred. The goodwill related to BioSepra was written off against the sale of the BioSepra business in 2004. Due to Ciphergen Biosystems KK's lower than expected operating results and cash flows throughout 2005 and based on revised forecasted results, a goodwill impairment loss of $2.5 million was recognized in the fourth quarter of 2005. The fair value of Ciphergen Biosystems KK was estimated using expected discounted cash flows. (See note 6, "Purchase of Additional Ownership Interest in Ciphergen Biosystems KK", and note 8, "Goodwill and Other Intangible Assets", of the Notes to Consolidated Financial Statements.)

Interest and Other Income (Expense), Net

Interest income was $839,000 in 2005, $505,000 in 2004, and $702,000 in 2003. The increase of $334,000 from 2004 to 2005 was largely due to higher interest rates. The decrease of $197,000 from 2003 to 2004 was primarily due to lower average investment balances.

Interest expense was $2.0 million in both 2005 and 2004, and $763,000 in 2003. Interest expense related to our convertible senior notes was approximately $1.4 million, of which $535,000 was a non-cash expense for amortizing the beneficial conversion feature associated with the notes. 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.

Other income (expense) was $717,000 of expense in 2005, $649,000 of expense in 2004, and $150,000 of expense in 2003. In 2005, other expense consisted primarily of $373,000 of expense for the amortization of issuance costs for the convertible senior notes and foreign exchange losses of approximately $232,000, largely due to the impact on the translation of the financial statements of our U.K. subsidiary from the strengthening of the U.S. dollar against the British pound and transaction losses at our Japanese subsidiary resulting from the strengthening of the U.S. dollar against the Japanese yen. In 2004, other expense consisted mainly of $373,000 in expense associated with the amortization of issuance costs for the convertible senior notes. 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, we attributed $133,000 of the joint venture's income to minority interest.

Income Taxes

Our provision for income taxes was due to current foreign income taxes, which were $7,000, $172,000, and $1.4 million for the years ended December 31, 2005, 2004 and 2003, respectively, including discontinued operations. Excluding discontinued operations, current foreign income taxes were an expense of $7,000, an expense of $109,000, and a benefit of $47,000 for the years ended December 31, 2005, 2004 and 2003, respectively.

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, 2005 we had net operating loss carryforwards of approximately $135.7 million for federal and $45.3 million for state tax purposes. If not utilized, these carryforwards will begin to expire beginning in 2009 for federal purposes and 2006 for state purposes. We also have research credit carryforwards of approximately $4.9 million and $4.5 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 Japan and the United Kingdom. We fully utilized our Japanese net operating loss carryforwards in 2004, resulting in higher 2004 Japanese income tax liability, although this was followed in 2005 by a net loss. The 2005 net loss can be carried forward for seven years. We expect to fully utilize our U.K. net operating loss carryforwards in 2006.

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 BioSepra business, which was sold to Pall Corporation on November 30, 2004. Income (loss) from discontinued operations was $0 in 2005, $1.8 million of loss in 2004, and $2.1 million of income in 2003.

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

	Eleven Months Ended November 30, 2004	Year Ended December 31, 2003
Revenue	$ 8,395	$ 14,734
Gross profit	4,921	9,483
Operating expenses	6,638	6,709
Operating income	(1,717)	2,774
Income (loss) before income taxes	(1,734)	3,525
Income tax provision	63	1,454
Income (loss) from discontinued operations, net of tax	(1,797)	2,071

The decrease in income from discontinued operations, net of tax, of $3.9 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. BioSepra'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 BioSepra, 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 decrease in BioSepra's revenue from 2003 to 2004 was due to the decreased level of such orders occurring in 2003 that did not occur in 2004. BioSepra 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 BioSepra Business, Net of Tax

The $18.5 million gain we recognized in 2004 on the sale of our BioSepra business is 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)
	27,011
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)
	8,484
Gain on sale of BioSepra business	$ 18,527

In addition, $1.0 million was placed in an interest-bearing escrow account for one year, after which that amount plus $21,000 of accrued interest was paid to Ciphergen and treated as an additional gain of $1,021,000 on the sale in 2005. This was partly offset by a $67,000 reduction of the gain on the sale of the BioSepra business for a post-closing adjustment in 2005, in accordance with the Asset Purchase Agreement, resulting in a net gain of $954,000 in 2005.

Liquidity and Capital Resources

From our inception through December 31, 2005, we have financed our operations principally with $211.0 million from the sales of products and services to customers and net proceeds from equity financings totaling approximately $160.8 million. This includes net proceeds of $92.4 million from our initial public offering in September 2000, net proceeds of $26.9 million from our Series E Preferred Stock financing in March 2000, and net proceeds of $15.0 million from the sale of 6,225,000 shares of our common stock and a warrant for 2,200,000 shares of our common stock to Quest Diagnostics on July 22, 2005. 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. In addition, in July 2005, Quest Diagnostics agreed to loan us up to $10 million with interest accrued at the prime rate plus 0.5% and paid monthly, solely to fund certain development activities related to our strategic alliance, against which we had borrowed approximately $2.5 million as of December 31, 2005. We also received net proceeds of $27.0 million from the sale of our BioSepra business in November 2004. An additional $1.0 million plus accrued interest which was in an interest-bearing escrow account for one year after the sale of our BioSepra business was paid to us on December 1, 2005. Cash, cash equivalents and short-term investments at December 31, 2005 were $28.0 million, compared to $37.6 million at December 31, 2004. Working capital at December 31, 2005 was $27.1 million, compared to $39.9 million at December 31, 2004. The decrease in working capital was principally due to a net $27.1 million decrease in cash and investments to fund our operating losses, partly offset by a $17.5 million cash increase resulting from the sale of our

common stock to, and loans from, Quest Diagnostics. In addition, there was a $5.0 million decrease in accounts receivable, reflecting the decline in revenue from continuing operations in 2005 compared to 2004, and a $1.3 million decrease in inventory which resulted from our reducing and delaying raw materials purchases. These decreases were partially offset by a $1.2 million decrease in accrued liabilities due to our cost-cutting measures and reduced inventory purchases, and a $1.4 million decrease in current deferred revenue consistent with our lower revenues. Long-term debt and capital lease balances at December 31, 2005 totaled $31.5 million, compared to $29.4 million at December 31, 2004, largely due to a loan draw down of $2.5 million from the line of credit provided by Quest Diagnostics.

Net cash used in operating activities was $22.9 million in 2005 compared to $32.5 million in 2004. Less cash was collected from customers in 2005 as compared to 2004 due to lower sales in 2005. Cash used in operating activities was mainly to fund payroll, inventory purchases and operating expenses. The decrease in cash collected was offset by an increase in interest income received in 2005 as compared to 2004 as a result of higher interest rates. 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 investing activities was $3.5 million in 2005 compared to net cash provided by investing activities of $34.0 million in 2004. Net cash used in investing activities in 2005 included property and equipment purchases of $2.8 million and payments of $587,000 for a technology license related to our litigation which was settled in 2003. We also paid $1.1 million to Pall Corporation for post-closing adjustments related to the sale of our BioSepra business, based on the final financial statements as of the closing date, as specified in the Asset Purchase Agreement, and we received $1.0 million plus $21,000 of accrued interest from an escrow account related to the sale of our BioSepra business. 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 BioSepra 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. We anticipate capital expenditures of approximately $2-3 million in 2006.

Net cash provided by financing activities was $17.2 million in 2005 compared to $792,000 in 2004. The increase resulted primarily from $15.0 million in net proceeds from the sale of our common stock to Quest Diagnostics and the receipt of $2.5 million in loans from Quest Diagnostics. There was also a repayment of one stockholder loan in the aggregate principal amount of $349,000, and the issuance of common stock under our stock option and employee stock purchase plans of $349,000, offset by repayments of an equipment financing loan of $925,000 and the repayment of capital lease obligations of $24,000. 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.

We currently believe that current cash resources together with existing debt facilities will be sufficient to maintain our operations for the next 12 months. Subsequently, we currently expect to fund our liquidity needs as well as expenditures for our obligations related to the strategic alliance with Quest Diagnostics and for capital requirements from a combination of available cash and short-term investments, proceeds from the alliance with Quest Diagnostics including borrowings from Quest Diagnostics, and potential sales of additional equity and/or debt securities. We will be required to raise additional capital at some point in the future, which might be achieved through a variety of 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 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 additional 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 convertible senior notes or the loans from Quest Diagnostics if and when they come due.

The following summarizes Ciphergen's contractual obligations at December 31, 2005, 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)	$ 49	$ 21	$ 28	$ —	$ —
Interest payable on capital lease obligations	3	2	1	—	—
Equipment financing loan(1)	377	377	—	—	—
Interest payable on equipment financing loan	8	8	—	—	—
Loan from Quest Diagnostics(1)	2,500	—	—	2,500	—
Interest payable on loan from Quest Diagnostics(2)	883	194	387	302	—
Convertible senior notes(3)	30,000	—	30,000	—	—
Interest payable on convertible senior notes	4,050	1,350	2,700	—	—
Non-cancelable collaboration obligations(4)(5)	1,529	1,529	—	—	—
Non-cancelable operating lease obligations	10,779	4,028	6,246	505	—
Purchase obligations(6)	641	641	—	—	—
Total contractual obligations	$50,819	$ 8,150	$ 39,362	$ 3,307	$ —

(1) Principal amounts, not including interest.

(2) Based on outstanding principal balance and interest rate as of December 31, 2005.

(3) Excludes the beneficial conversion feature amounting to $2,677, less related amortization of $1,263.

(4) We have extended our commitment to fund a Biomarker Discovery Center laboratory at The Johns Hopkins University School of Medicine, which totals $305,000 for the period December 2005 to March 2006, after which we expect to negotiate a further extension. None of this amount had been paid at December 31, 2005. This $305,000 commitment is non-cancelable.

(5) On October 3, 2005, the Company entered into a two year research and license agreement with University College London and UCL BioMedica Plc. (together, "UCL") to utilize Ciphergen's suite of proteomic solutions (Deep Proteome™, Pattern Track™ Process and ProteinChip® System) to further UCL's ongoing research in ovarian cancer and breast cancer. Under the terms of the agreement, Ciphergen will have exclusive rights to license intellectual property resulting from discoveries made during the course of this collaboration for use in developing, manufacturing and selling products and services utilizing the intellectual property. Ciphergen is obligated to make contributions of approximately $2.1 million in cash and $652,000 in the form of Ciphergen equipment, software, arrays and consumable supplies as requested by UCL, valued at Ciphergen's list selling price, to cover part of the costs incurred by UCL specifically for this research program. $1.1 million of the cash obligation is to be paid in the first year of the agreement and is non-cancelable. The

remainder is to be paid in the second year of the agreement and is cancelable with three months advance notice. As of December 31, 2005, Ciphergen had expensed $306,000, of which $33,000 represented our cost for the arrays and consumables we had provided, and the remaining $273,000 was recorded as an accrued liability.

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

On November 29, 2005, we were notified by the holder of a portion of our convertible senior notes that Ciphergen was in default under the indenture related to the convertible senior notes due to the delinquency in our SEC filing, and that we had 60 days from the date of the notice of default to cure the default. We cured this deficiency by filing our Quarterly Report on Form 10-Q covering the third quarter of 2005 on December 21, 2005. Ciphergen believes it has complied with all other requirements set forth in its credit agreements.

Off-Balance Sheet Arrangements

As of December 31, 2005, we had no off-balance sheet arrangements that are reasonably likely to have a current or future material effect on our consolidated financial condition, results of operations, liquidity, capital expenditures or capital resources.

Recent Accounting Pronouncements

See note 1 of the Notes to 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.

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, 2005, our only investment was a fixed rate annuity with a fair value of $2.2 million which was liquidated in February 2006. We believe that, in the near-term, we will maintain our available funds in money market accounts, or invest in short-term, highly liquid securities with original maturities of 90 days or less.

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 currency of Ciphergen Biosystems KK is the Japanese yen. Accordingly, the accounts of this operation 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 $4.2 million at December 31, 2005.

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 (expense), net 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 and none were entered into during 2005. Net realized foreign currency gains and losses related to foreign currency forward contracts were not material for the year ended December 31, 2004, and there were no such gains or losses in the year ended December 31, 2005. 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

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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, 2005 and 2004, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2005 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.

/s/ **PricewaterhouseCoopers LLP**

San Jose, California
March 17, 2006

CIPHERGEN BIOSYSTEMS, INC.

CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)

	December 31, 2005	December 31, 2004
ASSETS		
Current assets:		
Cash and cash equivalents	$ 25,738	$ 35,392
Short-term investment	2,240	2,175
Accounts receivable, net of allowance for doubtful accounts of $238 and $247, respectively	5,828	10,811
Notes receivable from related parties	—	126
Prepaid expenses and other current assets	1,746	1,847
Inventories	5,594	6,919
Total current assets	41,146	57,270
Property, plant and equipment, net	7,320	9,315
Goodwill	76	2,529
Other intangible assets, net	2,417	3,040
Other long-term assets	1,852	2,223
Total assets	$ 52,811	$ 74,377
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 3,188	$ 3,369
Accrued liabilities	6,298	7,499
Deferred revenue	4,132	5,529
Current portion of capital lease obligations	21	16
Current portion of equipment financing loan	377	925
Total current liabilities	14,016	17,338
Deferred revenue	508	855
Capital lease obligations, net of current portion	28	28
Equipment financing loan, net of current portion	—	377
Long-term debt to related party	2,500	—
Convertible senior notes, net of discount	28,586	28,051
Other long term liabilities	650	1,013
Total liabilities	46,288	47,662
Commitments and contingencies (note 13)		
Stockholders' equity:		
Common stock, $0.001 par value Authorized: 80,000,000 shares at December 31, 2005 and 2004 Issued and outstanding: 35,998,881 shares and 29,473,083 shares at December 31, 2005 and 2004, respectively	36	29
Additional paid-in capital	202,485	187,133
Notes receivable from stockholders	—	(349)
Accumulated other comprehensive income (loss)	(204)	263
Accumulated deficit	(195,794)	(160,361)
Total stockholders' equity	6,523	26,715
Total liabilities and stockholders' equity	$ 52,811	$ 74,377

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,		
	2005	2004	2003
Revenue:			
Products	$ 18,350	$ 31,378	$ 35,872
Services	8,896	8,803	7,766
Total revenue	27,246	40,181	43,638
Cost of revenue:			
Products	9,372	11,199	11,911
Services	4,321	3,876	3,426
Litigation settlement	—	—	7,257
Total cost of revenue	13,693	15,075	22,594
Gross profit	13,553	25,106	21,044
Operating expenses:			
Research and development	13,196	19,268	23,628
Sales and marketing	18,009	26,019	21,255
General and administrative	14,404	14,136	14,815
Goodwill impairment	2,453	—	—
Total operating expenses	48,062	59,423	59,698
Loss from operations	(34,509)	(34,317)	(38,654)
Interest income	839	505	702
Interest expense	(1,993)	(2,001)	(763)
Other income (expense), net	(717)	(649)	(150)
Loss from continuing operations before income taxes	(36,380)	(36,462)	(38,865)
Income tax provision (benefit) from continuing operations	7	109	(47)
Net loss from continuing operations	(36,387)	(36,571)	(38,818)
Discontinued operations:			
Income (loss) from discontinued operations, net of tax	—	(1,797)	2,071
Gain from sale of discontinued operations, net of tax	954	18,527	—
Net income from discontinued operations	954	16,730	2,071
Net loss	$ (35,433)	$ (19,841)	$ (36,747)
Net income (loss) per share, basic and diluted:			
Net loss per share from continuing operations	$ (1.13)	$ (1.25)	$ (1.38)
Net income per share from discontinued operations	0.03	0.57	0.07
Net loss per share	$ (1.10)	$ (0.68)	$ (1.31)
Shares used in computing basic and diluted net income (loss) per share	32,321	29,244	28,154

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,		
	2005	2004	2003
Cash flows from operating activities:			
Net loss	$ (35,433)	$ (19,841)	$ (36,747)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	5,463	6,960	6,192
Goodwill impairment	2,453	—	—
Change in minority interest	—	—	133
Stock-based compensation expense	—	602	1,418
Common stock issued to Company officer as compensation	55	—	—
Amortization of debt discount associated with beneficial conversion feature of convertible senior notes	535	536	192
Amortization of debt issuance costs	373	373	125
Accrued investment income	(65)	(64)	(62)
Interest accrued on notes receivable from related parties	(6)	(66)	(84)
Non-cash portion of litigation settlement	—	—	4,257
Loss on retirement of fixed assets	242	208	114
Provision for bad debts	25	214	484
Losses on write-down of inventory	594	1,843	691
Gain from sale of BioSepra business	(954)	(18,527)	—
Changes in operating assets and liabilities, net of assets acquired or sold and liabilities assumed or relieved in business combinations:			
Accounts receivable	4,729	2,267	(1,203)
Prepaid expenses and other current assets	193	572	105
Inventories	900	(4,949)	(929)
Other long-term assets	(43)	(10)	(246)
Accounts payable and accrued liabilities	(257)	(2,827)	3,027
Accounts payable to related party	—	—	(184)
Deferred revenue	(1,702)	4	2,140
Other long-term liabilities	1	247	(69)
Net cash used in operating activities	(22,897)	(32,458)	(20,646)
Cash flows from investing activities:			
Purchase of property, plant and equipment	(2,837)	(4,568)	(6,350)
Proceeds from capital lease financing to reimburse previous cash outlays to purchase facility improvements	—	601	—
Purchase of short-term investments	—	—	(10,639)
Maturities of short-term investments	—	11,261	13,224
Short-term investments sold prior to maturity	—	850	—
Repayment of notes receivable from related party	—	—	230
Payment for license related to litigation settlement	(587)	(1,038)	(613)
Payment to Pall Corporation for post-closing adjustments related to sale of BioSepra business	(1,111)	—	—
Increase in goodwill from BioSepra acquisition due to income tax settlement	—	(203)	—
Purchase of Ciphergen Biosystems KK common stock	—	(1,000)	—
Proceeds from sale of BioSepra business, net	1,021	28,055	—
Net cash provided by (used in) investing activities	(3,514)	33,958	(4,148)
Cash flows from financing activities:			
Net proceeds from sale of common stock and warrant to Quest Diagnostics	14,954	—	—
Proceeds from loan from Quest Diagnostics	2,500	—	—
Repurchases of common stock	—	(3)	—
Proceeds from exercises of stock options and warrants	14	329	717
Proceeds from issuance of common stock under employee stock purchase plan	336	887	836
Repayments of notes receivable from stockholders	349	744	196
Principal payments on capital lease obligations	(24)	(376)	(684)
Proceeds from long-term debt	—	—	32,066
Issuance costs of convertible senior notes	—	—	(1,866)
Repayments of long-term debt	(925)	(789)	(313)
Net cash provided by financing activities	17,204	792	30,952
Effect of exchange rate changes	(447)	247	1,550
Net increase (decrease) in cash and cash equivalents	(9,654)	2,539	7,708
Cash and cash equivalents, beginning of year	35,392	32,853	25,145
Cash and cash equivalents, end of year	$ 25,738	$ 35,392	$ 32,853
Supplemental cash flow information:			
Cash paid for interest	$ 783	$ 1,593	$ 173
Cash paid for income taxes	44	2,135	62
Supplemental schedule of non-cash investing and financing activities:			
Acquisition of property and equipment under capital leases	40	21	21
Transfer of fixed assets to inventory	283	446	618

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

CIPHERGEN BIOSYSTEMS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in thousands)

	Shares	Amount	Additional Paid-In Capital	Notes Receivable From Stockholders	Deferred Stock-Based Compensation	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total
Balances, January 1, 2003	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
Sale 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
Sale 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
Comprehensive loss:								
Net loss	—	—	—	—	—	—	(35,433)	(35,433)
Foreign currency translation adjustment	—	—	—	—	—	(467)	—	(467)
Total comprehensive loss								(35,900)
Stock options exercised	12	—	14	—	—	—	—	14
Sale of common stock under employee stock purchase plan	264	1	335	—	—	—	—	336
Sale of common stock and warrant to Quest Diagnostics	6,225	6	14,948	—	—	—	—	14,954
Issuance of common stock to Company officer	25	—	55	—	—	—	—	55
Repayment of notes receivable from stockholders	—	—	—	349	—	—	—	349
Balances, December 31, 2005	35,999	$ 36	$ 202,485	$ —	$ —	$ (204)	$ (195,794)	$ 6,523

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

1. Organization and Summary of Significant Accounting Policies

The Company

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

The Company has incurred significant net losses and negative cash flows from operations since inception. At December 31, 2005, the Company had an accumulated deficit of $195.8 million. Management believes that currently available resources together with existing debt facilities will provide sufficient funds to enable the Company to meet its obligations for the next 12 months. Subsequently, Ciphergen currently expects to fund its liquidity needs as well as expenditures for its obligations related to the strategic alliance with Quest Diagnostics and for capital requirements from a combination of available cash and short-term investments, proceeds from the alliance with Quest Diagnostics including borrowings from Quest Diagnostics, and potential sales of additional equity and/or debt securities. The Company's ability to continue to meet its obligations and to achieve its business objectives is dependent upon, among other things, raising additional capital or generating sufficient revenue in excess of costs. At such time as the Company requires additional funding, the Company may 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 or convertible senior notes. If the Company obtains additional funds through arrangements with collaborators or strategic partners, it may be required to relinquish its rights to certain technologies or products that it might otherwise seek to retain. There can be no assurance that the Company will be able to obtain such financing, or obtain it on acceptable terms. If Ciphergen is unable to obtain financing on acceptable terms, it may be unable to execute its business plan, it could be required to delay or reduce the scope of its operations, and it may not be able to pay off the convertible senior notes or the loans from Quest Diagnostics if and when they come due.

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. (See note 7, "Discontinued Operation-Sale of BioSepra Business.")

BioSepra S.A. was a wholly-owned subsidiary and was consolidated through November 30, 2004, at which time the Company sold BioSepra 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 BioSepra business as a discontinued operation.

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, 2005 and 2004, the Company classified all marketable securities as "available-for-sale" and carried them at fair value with unrealized gains or losses related to these securities included as a component of other comprehensive income (loss) until realized. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income. Realized gains and losses are determined using the specific identification method. The cost of securities sold is based on the specific identification method.

The Company's short-term investment at December 31, 2005 and 2004 consisted of an investment in a fixed rate annuity. The annuity is not within the scope of SFAS 115, "Accounting for Certain Investments in Debt and Equity Securities." However, fair value approximates its carrying 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 approximated fair value due to their short maturities. The carrying value of the capital leases approximated their fair value based on the borrowing rates currently available to the Company for loans with similar terms. The carrying value of the equipment financing loan and the long-term debt from the credit facility provided by Quest Diagnostics approximated their fair values based on 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 value of the convertible senior notes as compared to their book value was as follows (in thousands):

	December 31, 2005		December 31, 2004	
	Book Value	Fair Value	Book Value	Fair Value
Convertible senior notes	$ 28,586	$ 21,600	$ 28,051	$ 21,525

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, 2005 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 10% or more of revenue in 2003, 2004 or 2005.

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, plant 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; demonstration equipment, 2 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. In determining whether there is an impairment of goodwill, the estimated fair value of the reporting unit in which the goodwill is recorded is calculated using a discounted future cash flow method. The resulting fair value is then compared to the net book value of the reporting unit, including goodwill. If the net book value of a reporting unit exceeds its fair value, the amount of the impairment loss is measured 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, a goodwill impairment loss is recognized.

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. As of December 31, 2005, the Company believes no such impairment existed. 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, including systems, accessories and consumables, 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 maintenance contract. Coverage under both the standard and extended maintenance contracts is identical. Revenue for both the standard and extended 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 $285,000 in 2005, $665,000 in 2004, and $279,000 in 2003.

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,		
	2005	2004	2003
Net loss as reported	$ (35,433)	$ (19,841)	$ (36,747)
Add: Employee stock-based compensation expense in reported net income, net of tax	—	621	1,368
Less: Employee stock-based compensation expense determined under the fair value method, net of tax	(5,725)	(6,369)	(4,782)
Pro forma net loss	$ (41,158)	$ (25,589)	$ (40,161)
Basic and diluted net loss per share:			
As reported	$ (1.10)	$ (0.68)	$ (1.31)
Pro forma	$ (1.27)	$ (0.88)	$ (1.43)

The value of each option grant was estimated on the date of grant using the Black-Scholes option-pricing model in 2005, 2004 and 2003 with the following weighted assumptions:

	Stock Option Plan			Employee Stock Purchase Plan		
	2005	2004	2003	2005	2004	2003
Assumptions:						
Risk-free interest rate	4.1%	3.2%	2.7%	3.5%	1.9%	1.1%
Expected life	5 years	5 years	5 years	0.5 year	0.5 year	0.5 year
Expected volatility	90%	93%	69%	90%	93%	69%
Expected dividend yield	—	—	—	—	—	—
Weighted average fair values:						
Exercise price less than market price	$ —	$ —	$ —	$ 0.71	$ 1.43	$ 1.13
Exercise price equal to market price	$ 1.21	$ 5.56	$ 3.61	$ —	$ —	$ —
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 (loss)."

The functional currency of BioSepra S.A. was the euro. Upon the completion of the sale of BioSepra on November 30, 2004, the cumulative translation adjustment relating to BioSepra 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 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 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 adopted this standard beginning in 2006, but its adoption did not have a material impact on the Company's consolidated financial position, results of operations or cash flows.

In December 2004, the FASB issued SFAS No. 123 (Revised), "Share-Based Payment." This standard requires the measurement of all stock-based compensation, including stock options, using the fair value method and the recording of such expense in the Company's consolidated statements of income. Beginning in the first quarter of 2006, Ciphergen will adopt SFAS 123(R) under the modified prospective transition method using the Black-Scholes pricing model. Under the new standard, the Company's estimate of compensation expense will require a number of complex and subjective assumptions including our stock price volatility, employee exercise patterns (expected life of the options), future forfeitures and related tax effects. Although the adoption of SFAS 123(R) will have no adverse impact to the Company's balance sheet and cash flows, it will adversely affect the Company's net profit (loss) and earnings (loss) per share. See "Stock-based compensation" above for the pro forma net income (loss) and net income (loss) per share amounts, for fiscal 2003 through fiscal 2005, as if the Company had used a fair-value-based method similar to the methods required under SFAS 123(R) to measure compensation expense for employee stock incentive awards.

In March 2005, the Securities and Exchange Commission ("SEC") issued Staff Accounting Bulletin ("SAB") No. 107, "Share-Based Payment". SAB 107 provides guidance on the initial implementation of SFAS 123(R). In particular, the statement includes guidance related to share-based payment awards for non-employees, valuation methods and selecting underlying assumptions such as expected volatility and expected term. It also provides guidance on the classification of compensation expense associated with such awards and accounting for the income tax effects of those awards upon the adoption of SFAS 123(R). The Company will adopt this standard when it adopts SFAS 123(R).

In May 2005, the FASB issued SFAS No. 154, “Accounting Changes and Error Corrections”. SFAS 154 is a replacement of Accounting Principles Board Opinion (“APB”) No. 20 and SFAS 3. SFAS 154 provides guidance on the accounting for and reporting of accounting changes and error corrections. It establishes retrospective application as the required method for reporting a change in accounting principle. SFAS 154 provides guidance for determining whether retrospective application of a change in accounting principle is impracticable and for reporting a change when retrospective application is impracticable. The reporting of a correction of an error by restating previously issued financial statements is also addressed by SFAS 154. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005. The Company will adopt this standard beginning in 2006.

In June 2005, the FASB issued Financial Staff Position (“FSP”) FAS 143-1, “Accounting for Electronic Equipment Waste Obligations” (“FSP 143-1”), which provides guidance on the accounting for certain obligations associated with the Directive on Waste Electrical and Electronic Equipment (the “Directive”), which was adopted by the European Union (“EU”). Under the Directive, the waste management obligation for historical equipment (products put on the market on or prior to August 13, 2005) remains with the commercial user until the equipment is replaced. Adoption of this standard did not have a material impact on the Company’s consolidated financial position, results of operations or cash flows.

In September 2005, the FASB issued EITF Issue No. 04-13, “Accounting for Purchases and Sales of Inventory with the Same Counterparty” (“EITF 04-13”). The issue provided guidance on the circumstances under which two or more inventory transactions with the same counterparty should be viewed as a single nonmonetary transaction within the scope of APB Opinion No. 29, “Accounting for Nonmonetary Transactions.” The issue also provided guidance on circumstances under which nonmonetary exchanges of inventory within the same line of business should be recognized at fair value. EITF 04-13 will be effective for transactions completed in reporting periods beginning after March 15, 2006. The Company is evaluating the impact that this issue will have on its consolidated financial statements.

In October 2005, the FASB issued FSP FAS 123(R)-2, “Practical Accommodation to the Application of Grant Date as Defined in FAS 123(R)” (“FSP 123(R)-2”). FSP 123(R)-2 provides guidance on the application of grant date as defined in SFAS 123(R). In accordance with this standard a grant date of an award exists if a) the award is a unilateral grant and b) the key terms and conditions of the award are expected to be communicated to an individual recipient within a relatively short time period from the date of approval. The Company will adopt this standard when it adopts SFAS 123(R), and does not expect it to have a material impact on the Company’s consolidated financial position, results of operations or cash flows.

In November 2005, the FASB issued FSP FAS 123(R)-3, “Transition Election Related to Accounting for the Tax Effects of Share-Based Payment Awards” (“FSP 123(R)-3”). FSP 123(R)-3 provides an elective alternative method that establishes a computational component to arrive at the beginning balance of the accumulated paid-in capital pool related to employee compensation and a simplified method to determine the subsequent impact on the accumulated paid-in capital pool of employee awards that are fully vested and outstanding upon the adoption of SFAS 123(R). The Company is currently evaluating this transition method.

2. Strategic Alliance with Quest Diagnostics

On July 22, 2005, the Company entered into a strategic alliance agreement with Quest Diagnostics covering a three year period during which the parties will strive to develop and commercialize up to three diagnostic tests based on Ciphergen’s proprietary SELDI ProteinChip technology. Pursuant to the agreement, Quest Diagnostics will have the non-exclusive right to commercialize these tests on a

worldwide basis, with exclusive commercialization rights in territories where Quest Diagnostics has a significant presence for up to five years following commercialization. As part of the strategic alliance, there is a royalty arrangement under which Quest Diagnostics will pay royalties to Ciphergen based on fees earned by Quest Diagnostics for applicable diagnostics services, and Ciphergen will pay royalties to Quest Diagnostics based on Ciphergen's revenue from applicable diagnostics products. To date, no such royalties have been earned by either party. Quest Diagnostics and Ciphergen have also entered into a supply agreement under which Ciphergen will sell instruments and consumable supplies to Quest Diagnostics to be used for performing diagnostics services. In addition, for an aggregate purchase price of $15 million, Quest Diagnostics has purchased 6,225,000 shares of Ciphergen's common stock, or approximately 17.4% of shares outstanding after the transaction, and a warrant having a term of five years to purchase up to an additional 2,200,000 shares for $3.50 per share. The warrant was valued at approximately $2.2 million based on the fair value as determined by a Black-Scholes model using the following assumptions: risk-free interest rate, 4.04%; expected life, 5 years; expected volatility 69%. Quest Diagnostics has also agreed to loan Ciphergen up to $10 million with interest accrued at the prime rate plus 0.5% and paid monthly, solely to fund certain development activities related to the strategic alliance. Borrowings may be made by Ciphergen in monthly increments of up to approximately $417,000 on the last day of each month during the first two years of the strategic alliance, and at December 31, 2005, such borrowings amounted to $2.5 million. This loan, collateralized by certain intellectual property of Ciphergen, will be forgiven based on Ciphergen's achievement of certain milestones related to development, regulatory approval and commercialization of certain diagnostic tests. Should the Company fail to achieve these milestones, the outstanding principal amount of any such loans will become due and payable on July 22, 2010. From the inception of the strategic alliance through December 31, 2005, the Company had spent approximately $2.2 million of the loan proceeds on in-house research and development, as well as collaborations with others, directed towards achieving the milestones. Spending for this purpose is expected to continue and to increase, partly as a result of the additional expenses associated with the collaboration with University College London described in note 13, "Commitments and Contingencies".

3. Marketable Securities and Other Investments

The Company had no marketable securities at December 31, 2005 and December 31, 2004.

During 2005, no marketable securities were sold prior to maturity. 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.

At both December 31, 2005 and 2004, the Company had an investment in a fixed rate annuity with a fair value of approximately $2.2 million. In February 2006, the Company liquidated this investment.

4. Inventories (in thousands)

	December 31,	
	2005	2004
Raw materials	$ 1,775	$ 2,822
Work in progress	1,241	1,400
Finished goods	2,578	2,697
	$ 5,594	$ 6,919

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

	December 31, 2005	2004
Machinery and equipment	$ 11,760	$ 10,473
Demonstration equipment	3,505	4,084
Leasehold improvements	3,669	3,616
Computers and equipment	1,778	1,992
Furniture and fixtures	827	896
Construction in progress	—	298
	21,539	21,359
Less: Accumulated depreciation and amortization	(14,219)	(12,044)
	$ 7,320	$ 9,315

Property, plant and equipment included $183 and $184 of machinery and equipment under capital leases at December 31, 2005 and 2004, respectively. Accumulated amortization of assets under capital leases totaled $136 and $143 at December 31, 2005 and 2004, respectively.

Construction in progress at December 31, 2004 represented manufacturing equipment being built and installed at the Company's Fremont, California facility to automate certain processes in the production of ProteinChip Arrays. This equipment was placed in service in 2005 and reclassified as machinery and equipment.

Depreciation expense for property, plant and equipment was $4,253 in 2005, $4,741 in 2004 and $4,112 in 2003.

6. Purchase of Additional Ownership Interest in Ciphergen Biosystems KK

In January 1999, the Company formed Ciphergen Biosystems KK as a joint venture with Sumitomo Corporation to distribute the Company's products in Japan. On March 23, 2004, the Company acquired Sumitomo's remaining interest in Ciphergen Biosystems KK, bringing its total ownership to 100%. The Company paid $1.0 million in cash. 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
	$ 1,000

The amount of the purchase price in excess of the net assets acquired was recorded as goodwill. We performed annual impairment tests through 2004 and determined that no impairment had occurred. Due to Ciphergen Biosystems KK's lower than expected operating results and cash flows throughout 2005 and based on revised forecasted results, a goodwill impairment loss of $2.5 million was recorded in the fourth quarter of 2005. The fair value of Ciphergen Biosystems KK was estimated using expected discounted cash flows.

7. Discontinued Operation-Sale of BioSepra Business

On November 30, 2004, Ciphergen completed the sale to Pall Corporation of its wholly-owned French subsidiary, BioSepra S.A., along with selected other assets (together "the BioSepra business"). The sale of the BioSepra business generated net proceeds of approximately $27.0 million. An additional $1.0 million was placed in an interest-bearing escrow account for one year, after which that amount plus $21,000 of accrued interest was paid to Ciphergen and treated as an additional gain of $1,021,000 in 2005. This was partly offset by a $67,000 reduction of the gain on the sale of the BioSepra business for a post-closing adjustment in 2005, in accordance with the Asset Purchase Agreement, resulting in a net gain of $954,000 in 2005. The Company recognized an $18.5 million gain of $1,021,000 on this sale in 2004, summarized as follows (in thousands):

Net proceeds:	
Cash proceeds received	$ 28,376
Less: Post-closing adjustment owed to buyer, paid in 2005	(1,044)
Less: Transaction costs	(321)
	27,011
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)
	8,484
Gain on sale of BioSepra business	$ 18,527

As a result, Ciphergen reported the BioSepra business as a discontinued operation beginning in the fourth quarter of 2004 and restated 2003 on a comparative basis.

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

	Eleven Months Ended November 30, 2004	Year Ended December 31, 2003
Revenue	$ 8,395	$ 14,734
Gross profit	4,921	9,483
Operating expenses	6,638	6,709
Operating income (loss)	(1,717)	2,774
Income (loss) before income taxes	(1,734)	3,525
Income tax provision	63	1,454
Income (loss) from discontinued operations, net of tax	(1,797)	2,071

8. 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 from 2002 through 2005, and in 2005 determined that approximately $2.5 million of goodwill related to the Company's Japanese subsidiary should be written off. (See note 6, "Purchase of Additional Ownership Interest in Ciphergen Biosystems KK.") Goodwill and other intangible assets consisted of the following (in thousands):

	December 31, 2005			December 31, 2004		
	Gross Carrying Amount	Accumulated Amortization	Total	Gross Carrying Amount	Accumulated Amortization	Total
Non-amortizing:						
Goodwill	$ 76	$ —	$ 76	$ 2,529	$ —	$ 2,529
Amortizing:						
Acquired license related to litigation settlement	5,743	3,326	2,417	5,156	2,116	3,040
	$ 5,819	$ 3,326	$ 2,493	$ 7,685	$ 2,116	$ 5,569

Additions to goodwill and other intangible assets consisted of approximately $587,000 paid in license fees related to a litigation settlement. Amortization expense for these intangible assets was (in thousands):

	2005	2004	2003
Acquired completed technology	$ —	$ 707	$ 772
Patents	—	53	57
Acquired license related to litigation settlement	1,210	1,210	906
	$ 1,210	$ 1,970	$ 1,735

Annual amortization expense for these intangible assets is expected to be approximately $1.2 million in both 2006 and 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, 2005, the Company had paid or accrued a total of $2.2 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 both 2004 and 2005, and the remaining $10.2 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.

9. Accrued Liabilities (in thousands)

	December 31,	
	2005	2004
Payroll and related expenses	$ 1,795	$ 2,022
Compensated absences	998	1,331
Legal and accounting fees	1,526	1,045
Tax-related liabilities	225	374
Accrued interest on convertible senior notes	450	450
Post-closing adjustment owed to buyer of BioSepra business	—	1,044
Other accrued liabilities	1,304	1,233
	$ 6,298	$ 7,499

10. 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. 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 maintenance contract. Coverage under both the standard and extended maintenance contracts is identical. Revenue for both the standard and extended 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, 2005 and 2004 were as follows (in thousands):

		2005	2004
Balance at beginning of period		$ 3,778	$ 3,442
Add:	Costs incurred for maintenance contracts	2,688	2,664
	Revenue deferred for separately priced maintenance contracts	4,287	5,473
Less:	Settlements made under maintenance contracts	(2,688)	(2,664)
	Revenue recognized for separately priced maintenance contracts	(5,234)	(5,137)
Balance at end of period		$ 2,831	$ 3,778

11. 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 2005 and 2004 amounted to $535,000 and $536,000, 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 105.0% of the principal balance upon a change in control of the Company. 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, 2005 all notes remained issued and outstanding.

Loan from Quest Diagnostics

On July 22, 2005, Quest Diagnostics agreed to loan the Company up to $10 million. This loan facility is described more fully in note 2, “Strategic Alliance with Quest Diagnostics.”

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 Company 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. The loan is collateralized by the equipment being financed as well as certain other assets of the Company. As of December 31, 2005, the balance outstanding on the loan, including interest charges, was approximately $385,000, 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 4.9% at December 31, 2005.

As of December 31, 2005, future minimum lease payments under capital lease agreements were as follows (in thousands):

2006	$ 23
2007	20
2008	9
2009 and after	—
Total minimum lease payments	52
Less: Amount representing interest	3
Present value of minimum lease payments	49
Less: Current portion	21
Non-current portion	$ 28

12. Foreign Currency Contracts

During the years ended December 31, 2003 and 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 and none were entered into in 2005. 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 years ended December 31, 2003 and 2004, and there were no such gains or losses in the year ended December 31, 2005.

13 . 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 was $3,825,000, $3,685,000, and $3,514,000 in the years ended December 31, 2005, 2004 and 2003, 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.

As of December 31, 2005, future minimum payments under non-cancelable operating leases were as follows (in thousands):

2006	$ 4,028
2007	3,879
2008	2,367
2009	355
2010 and after	150
	$ 10,779

Inventory Purchase Obligations

At December 31, 2005, the Company had non-cancelable agreements with certain vendors obligating Ciphergen to purchase approximately $300,000 of inventory during 2006.

Product Retrofit

In July 2005, the Company was notified by a supplier about a potential safety hazard in certain pumps used in some older model ProteinChip Systems. The supplier is recommending that a capacitor in the pumps it supplied be replaced. The Company's management has evaluated the situation with the supplier and with legal counsel, and does not believe Ciphergen's cost for retrofitting the affected instruments or related liabilities will be material to our financial statements. The product retrofit does not affect Ciphergen's current Series 4000 line.

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, 2004 or 2005. The agreement was terminated in 2005.

Product Development Agreement with a Customer

In the third quarter of 2005, the Company sold nine ProteinChip Systems to one customer for $601,000. The Company also entered into a product development agreement with this same customer, whereby the customer will develop for Ciphergen a specific new product and Ciphergen may pay the customer up to $500,000 based on the customer's attainment of specified development milestones. Under this agreement, Ciphergen paid this customer $300,000 of development fees during 2005. This was recorded, following EITF 01-9, "Accounting for Consideration Given by a Vendor to a Customer (Including a Reseller of the Vendor's Products)", as a reduction to revenue, resulting in net revenue from this customer of approximately $301,000 in 2005. This constituted approximately 2% of products revenue and 1% of total revenue for 2005. In future periods, if this third party achieves a development milestone, Ciphergen will record its payment obligation as a reduction to revenue in the period in which that development milestone is met.

Non-Cancelable Collaboration Obligations

The Company has extended its 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 $305,000 for the period from December 2005 to March 2006, after which it is expected that a further extension will be negotiated. At December 31, 2005, $76,000 of this commitment had been expensed but not yet paid.

On October 3, 2005, the Company entered into a two year research and license agreement with University College London and UCL BioMedica Plc. (together, "UCL") to utilize Ciphergen's suite of proteomic solutions (Deep Proteome™, Pattern Track™ Process and ProteinChip® System) to further UCL's ongoing research in ovarian cancer and breast cancer. Under the terms of the agreement, Ciphergen has exclusive rights to license intellectual property resulting from discoveries made during the course of this collaboration for use in developing, manufacturing and selling products and services utilizing the intellectual property. Additionally, Ciphergen will contribute approximately $2.1 million in cash and $652,000 in the form of Ciphergen equipment, software, arrays and consumable supplies as requested by UCL, valued at Ciphergen's list selling price, to cover part of the costs incurred by UCL specifically for this research program. $1.1 million of the cash obligation is to be paid in the first year of the agreement and is non-cancelable. The remainder is to be paid in the second year of the agreement and is cancelable with three months advance notice. As of December 31, 2005, the Company had expensed $306,000, of which $33,000 represented the Company's cost for the arrays and consumables it had provided, and the remaining $273,000 was recorded as an accrued liability.

Litigation

Ciphergen and certain of its current and former officers have been named as defendants in a securities class action complaint filed on December 5, 2005, in the United States District Court, Northern District of California. The complaint has been brought on behalf of all persons who purchased Ciphergen's common stock from August 8, 2005, when the Company issued a press release announcing unaudited financial results for the second quarter of 2005, through November 16, 2005, when Ciphergen announced its

intention to restate those financial results. The Plaintiffs do not demand any particular amount in damages. The Company has not yet responded to this complaint. Given the early stage of this action, the Company cannot predict the ultimate outcome of this matter at this time. As a result, in accordance with Statement of Financial Accounting Standard No. 5, "Accounting for Contingencies", the Company has disclosed the existence of this lawsuit; however, no accrual for potential losses, if any, has been recorded.

14. Stockholders' Equity

At December 31, 2005 and 2004, 5,000,000 shares of preferred stock were authorized, but no shares were issued or outstanding.

The Company has adopted a Stockholder Rights Plan, the purpose of which is, among other things, to enhance the Board's ability to protect stockholder interests and to ensure that stockholders receive fair treatment in the event any coercive takeover attempt of the Company is made in the future. The Stockholder Rights Plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, the Company or a large block of the Company's common stock. The following summary description of the Stockholder Rights Plan does not purport to be complete and is qualified in its entirety by reference to the Company's Stockholder Rights Plan, which has been previously filed with the Securities and Exchange Commission as an exhibit to a Registration Statement on Form 8-A.

The rights issued pursuant to Ciphergen's Stockholder Rights Plan will become exercisable the tenth day after a person or group announces acquisition of 15% or more of Ciphergen's 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 the Company's common stock. If the rights become exercisable, the holders of the rights (other than the person acquiring 15% or more of Ciphergen's common stock) will be entitled to acquire, in exchange for the rights' exercise price, shares of Ciphergen's common stock or shares of any company in which the Company is merged, with a value equal to twice the rights' exercise price.

15. 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. All outstanding options under the 1993 Plan are now fully vested, and unexercised options generally expire ten years from the date of grant. At December 31, 2005, no shares of common stock were subject to repurchase by the Company. Since the Company's initial public offering, no options have been granted under the 1993 Plan. During 2003, 2004 and 2005, options for 84,731, 30,923 and 12,040 shares were exercised, respectively. Options for 24,319, 47,672 and 87,113 shares were canceled during 2003, 2004 and 2005, 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, 2005, the Company had 259,299 shares of common stock reserved for future stock option grants 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 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. During 2005, options for 2,727,000 shares were granted, options for 216 shares were exercised, and options for 1,319,471 shares were canceled.

During 2005, two executives terminated their employment with the Company. The vesting of a portion of one's stock options was accelerated, and the exercise periods for both were extended, allowing the executives to potentially purchase option shares that would otherwise have expired.

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	Options Outstanding			Weighted
	Available For Grant	Number of Shares	Price Per Share	Aggregate Price	Average Exercise Price
Balances, January 1, 2003	430	3,215	$ 0.23-8.50	$ 15,040	$ 4.68
Shares reserved for the 2000 Plan	1,100	—			
Reduction in shares reserved	(25)	—			
Options granted	(1,222)	1,222	4.35-11.96	8,107	6.63
Options canceled/shares repurchased	211	(211)	1.16-6.74	(1,022)	4.84
Options exercised	—	(172)	0.35-8.50	(717)	4.17
Balances, December 31, 2003	494	4,054	0.23-11.96	21,408	5.28
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	7.68
Options canceled/shares repurchased	688	(687)	1.16-11.96	(4,088)	5.95
Options exercised	—	(85)	0.35-8.50	(329)	3.88
Balances, December 31, 2004	792	5,025	0.23-11.96	30,367	6.04
Shares reserved for the 2000 Plan	900	—			
Reduction in shares reserved	(87)	—			
Shares granted to an officer	(25)	—			
Options granted	(2,727)	2,727	0.90-3.90	5,293	1.94
Options canceled	1,406	(1,406)	1.16-11.96	(7,390)	5.25
Options exercised	—	(12)	1.16-1.80	(14)	1.17
Balances, December 31, 2005	259	6,334	$ 0.23-11.96	$ 28,256	$ 4.46

The options outstanding and currently exercisable by weighted average exercise price at December 31, 2005 were as follows:

Range of Exercise Prices	Options Outstanding Number (in thousands)	Options Outstanding Weighted Average Remaining Contractual Life (Years)	Options Outstanding Weighted Average Exercise Price	Options Exercisable Number (in thousands)	Options Exercisable Weighted Average Exercise Price
$0.23-0.35	18	1.4	$ 0.34	18	$ 0.34
$ 0.90	663	10.0	$ 0.90	25	$ 0.90
$0.91-2.06	706	8.9	$ 1.79	200	$ 1.75
$2.19-2.85	743	9.5	$ 2.33	123	$ 2.34
$2.96-3.43	444	8.3	$ 3.04	239	$ 3.06
$ 3.49	742	4.3	$ 3.49	742	$ 3.49
$3.68-4.43	674	7.7	$ 4.15	506	$ 4.30
$4.53-6.08	716	6.2	$ 5.13	715	$ 5.13
$6.38-8.53	705	7.3	$ 7.95	705	$ 7.95
$8.64-11.96	923	7.9	$ 9.37	923	$ 9.37
$0.23-11.96	6,334	7.7	$ 4.46	4,196	$ 5.74

Stock-Based Compensation

During the years ended December 31, 2003, 2004 and 2005, 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: contractual lives of ten 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. No options have been granted to consultants since the Company's initial public offering in 2000. 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, 2005	2004	2003
Cost of revenue	$ —	$ 45	$ 81
Research and development	—	37	187
Sales and marketing	—	93	274
General and administrative	—	427	876
Total stock-based compensation	$ —	$ 602	$ 1,418

On December 20, 2005, Ciphergen's Board of Directors approved the accelerated vesting of all unvested and "out-of-the-money" stock options held by employees with an exercise price per share of $4.00 or higher. The accelerated vesting caused options previously awarded for the purchase of approximately 1,035,000 shares of Ciphergen's common stock, representing approximately 16% of total options outstanding, to vest and become exercisable immediately, subject to continued restrictions on sale. Of the 224 option grants subject to accelerated vesting, 27 are held by executive officers. Under APB No. 25 and FASB Interpretation No. 44, "Accounting for Certain Transactions Involving Stock Compensation" , the acceleration of the vesting of these options did not result in a compensation charge because the exercise

prices of the affected options was greater than the closing price of our common stock on December 20, 2005.

Warrants

At January 1, 2003, 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. During 2005, a warrant to purchase 2.2 million shares of Ciphergen common stock at $3.50 per share was issued to Quest Diagnostics as part of the Company's strategic alliance with Quest Diagnostics (See note 2, "Strategic Alliance with Quest Diagnostics".) At December 31, 2005, this warrant 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, 2005, the Company had 166,498 shares of common stock reserved for purchase by employees under this Plan. During 2003, 2004 and 2005, purchases of 310,026, 306,209 and 263,542 shares, respectively, were made under this Plan.

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.

16. 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.

In prior years, 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 $7,000, $172,000, and $1.4 million for the years ended December 31, 2005, 2004 and 2003, respectively, including discontinued operations. Excluding discontinued operations, current foreign income taxes were an expense of $7,000, an expense of $109,000, and a benefit of $47,000 for the years ended December 31, 2005, 2004 and 2003, respectively.

Based on the available objective evidence, management believes it is more likely than not that the net deferred tax assets related to the Company's operations will not be fully realizable. Accordingly, the Company has provided a full valuation allowance against its net deferred tax assets at December 31, 2005.

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

	December 31,	
	2005	2004
Depreciation and amortization	$ 8,947	$ 1,051
Other	6,814	7,095
Research and development and other credits	9,515	6,685
Net operating losses	48,767	42,365
Deferred tax assets	74,043	57,196
Less: Valuation allowance	(74,043)	(57,196)
	$ —	$ —

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

	2005	2004	2003
Tax at federal statutory rate	(34)%	(34)%	(34)%
State tax, net of federal benefit	(6)	(6)	(6)
Research and development credits	(3)	(4)	(5)
Foreign tax credits	(4)	—	—
Change in valuation allowance	48	35	43
Stock-based compensation	—	1	2
Foreign tax rate difference and other	(1)	3	4
Gain on sale of BioSepra	—	6	—
Provision for income taxes	0%	1%	4%

Pre-tax U.S. losses were $32.6 million, $21.4 million and $39.8 million in 2005, 2004 and 2003, respectively, including discontinued operations. Pre-tax foreign loss was $2.1 million in 2005 and pre-tax foreign income was $1.8 million and $4.6 million in 2004 and 2003, respectively, including discontinued operations. Excluding discontinued operations, pre-tax U.S. losses were $33.6 million, $38.4 million and $39.5 million in 2005, 2004 and 2003, respectively. Excluding discontinued operations, pre-tax foreign loss was $2.1 million in 2005 and pre-tax foreign income was $1.8 million and $641,000 in 2004 and 2003, respectively.

As of December 31, 2005, the Company had net operating loss carryforwards of approximately $135.7 million for federal and $45.3 million for state tax purposes. If not utilized, these carryforwards will expire beginning in 2009 for federal purposes and 2006 for state purposes.

As of December 31, 2005, the Company had research credit carryforwards of approximately $4.9 million and $4.5 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 foreign tax credit carryforwards of approximately $1.35 million for federal income tax purposes. If not utilized, the federal carryforwards will expire beginning in 2015.

The Company has used net operating loss carryforwards to reduce its income tax liabilities in Japan and the U.K. The Company fully utilized its Japanese net operating loss carryforwards in 2004, resulting in higher Japanese income tax liability in 2004, followed by a net loss in 2005. The 2005 net loss can be carried forward for seven years.

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.

17. Accumulated Other Comprehensive Income

Comprehensive income (loss) generally represents all changes in stockholders' equity except those resulting from investments or contributions by stockholders. The only component of comprehensive income (loss) that is excluded from the net loss is the Company's cumulative translation adjustments.

18. 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):

	Years Ended December 31,		
	2005	2004	2003
Numerator:			
Net loss from continuing operations	$ (36,387)	$ (36,571)	$ (38,818)
Net income from discontinued operations	954	16,730	2,071
Net loss	$ (35,433)	$ (19,841)	$ (36,747)
Denominator:			
Weighted average common shares outstanding	32,321	29,273	28,257
Weighted average unvested common shares subject to repurchase	—	(29)	(103)
Denominator for basic and diluted calculations	32,321	29,244	28,154
Net income (loss) per share, basic and diluted:			
Loss per share from continuing operations	$ (1.13)	$ (1.25)	$ (1.38)
Income per share from discontinued operations	.03	0.57	0.07
Net loss per share	$ (1.10)	$ (0.68)	$ (1.31)

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,		
	2005	2004	2003
Common stock subject to repurchase	—	5	65
Stock options outstanding	6,334	5,025	4,054
Common stock issuable under employee stock purchase plan	41	65	85
Common stock warrants outstanding	2,200	—	—
Shares that could be issued if all convertible senior notes were converted into common stock	3,265	3,265	3,265
	11,840	8,360	7,469

19. 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, 2005.

20. Related Parties

The Company purchased from Stanford Research Systems ("SRS") $548,000 of inventory in 2003, 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 had a joint development agreement with SRS. (See note 13, "Commitments and Contingencies".) No payments were made by Ciphergen to SRS under this agreement in 2003, 2004 or 2005. This director resigned from the Board on April 7, 2003, and in 2004 and later the vendor was no longer considered a related party.

On July 22, 2005, Quest Diagnostics purchased approximately 17.4% of the Company. (See note 2, "Strategic Alliance with Quest Diagnostics".)

21. Segment Information and Geographic Data

Ciphergen's revenue is derived from the sales of related products and services on a worldwide basis. 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, 2005, 2004 and 2003 (in thousands). Revenue from discontinued operations has been excluded.

	2005	2004	2003
ProteinChip Systems and related products	$ 18,350	$ 31,378	$ 35,872
Services	8,896	8,803	7,766
	$ 27,246	$ 40,181	$ 43,638

The Company sells its products and services directly to customers in North America, Western Europe and Japan, and through distributors in other parts of Europe and Asia and in Australia. Revenue for geographic regions reported below is based upon the customers' locations and excludes revenue from discontinued operations. 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, 2005, 2004 and 2003 (in thousands):

	2005	2004	2003
Revenue			
United States	$ 12,123	$ 17,636	$ 20,036
Canada	923	950	2,249
Europe	7,636	9,387	10,696
Asia	6,564	12,208	10,657
Total	$ 27,246	$ 40,181	$ 43,638
Long-lived assets			
United States	$ 6,256	$ 7,308	$ 7,502
Canada	20	111	208
Europe	561	958	7,018
Asia	483	938	1,163
Total	$ 7,320	$ 9,315	$ 15,891

In 2005, 2004 and 2003, sales to customers in Japan were 21%, 25% and 17%, respectively, of total revenue from continuing operations.

22. Quarterly Consolidated Financial Data (Unaudited)

The following table presents certain unaudited consolidated quarterly financial information for the eight quarters ended December 31, 2005. Revenue and gross profit for discontinued operations have been excluded in all periods shown as a result of the sale of our BioSepra business. 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 state fairly the unaudited quarterly results of operations set forth herein.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Fiscal Year
	(in thousands, except per share data)				
Total revenue					
2005	$ 6,648	$ 6,941	$ 7,056	$ 6,601	$ 27,246
2004	13,252	8,336	8,495	10,098	40,181
Gross profit					
2005	3,513	3,358	3,707	2,975	13,553
2004	9,282	4,036	5,557	6,231	25,106
Net loss from continuing operations					
2005	(9,332)	(9,328)	(7,476)	(10,251)	(36,387)
2004	(6,665)	(12,996)	(9,462)	(7,448)	(36,571)
Net income (loss) from discontinued operations					
2005	—	(67)	—	1,021	954
2004	(816)	(146)	(67)	17,759	16,730
Net income (loss)					
2005	(9,332)	(9,395)	(7,476)	(9,230)	(35,433)
2004	(7,481)	(13,142)	(9,529)	10,311	(19,841)
Basic and diluted net loss per share from continuing operations					
2005	(0.32)	(0.32)	(0.23)	(0.29)	(1.13)
2004	(0.23)	(0.45)	(0.32)	(0.25)	(1.25)
Basic and diluted net income (loss) per share from discontinued operations					
2005	0.00	(0.00)	0.00	0.03	0.03
2004	(0.03)	0.00	0.00	0.60	0.57
Basic and diluted net income (loss) per share					
2005	(0.32)	(0.32)	(0.23)	(0.26)	(1.10)
2004	(0.26)	(0.45)	(0.32)	0.35	(0.68)

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. Ciphergen evaluated its 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, under the supervision and with the participation of the Company's principal

executive and financial officers. 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. In our Form 10-Q/A for the second quarter of 2005, we reported a material weakness in our internal control over financial reporting related to revenue recognition. Specifically, the Company's revenue controls over (i) the accounting for transactions in which side letter arrangements have been entered into, and (ii) the determination of the collectibility of receivables for certain revenue transactions were not effective to ensure that revenue was recorded in the appropriate period. As noted in that report, under the direction of our Audit Committee, management developed and implemented additional controls and processes designed to ensure that information required to be disclosed in our periodic reports is recorded, processed, summarized and reported accurately. These controls and processes included:

- the addition of further controls over shipments of our products for revenue transactions;
- the addition of a policy prohibiting entering into side agreements without prior management approval, and a requirement for a written certification by the salesperson at the time of each order exceeding $50,000 confirming all aspects of the sale, including the terms of any otherwise undisclosed side agreements;
- strengthening of our credit assessment and accounts receivable processes; and
- providing additional training for our sales and marketing staff to minimize the risk of revenue recognition errors.

As of December 31, 2005, we have determined that the new controls are effectively designed and have demonstrated effective operation for a sufficient period of time to enable management to conclude that the material weakness identified during 2005 has been remediated.

There have been no changes in our internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f), that occurred during the quarter ended December 31, 2005 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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 2006 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 directors, 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 (the "Commission") 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, 2005.

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 Business Relationships and Related Party Transactions.”

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item is incorporated by reference from our definitive Proxy Statement referred to in Item 10 above under the heading “Principal Accounting Fees and Services.”

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):*

10 *Financial Statement Schedules:*

The following financial statement schedule of Ciphergen Biosystems, Inc. for the years ended December 31, 2005, 2004 and 2003 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.

10 *Exhibits:*

Number	Description of Document
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
4.4(11)	Amendment to Rights Agreement between the Company and Wells Fargo Bank, N.A. dated July 22, 2005
4.5(12)	Amendment to Rights Agreement between the Company and Wells Fargo Bank, N.A. dated September 30, 2005
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(10)	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
10.23(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
10.32(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	Employment Agreement between Gail Page and Registrant dated December 31, 2005
10.41(7)	Registration Rights Agreement dated August 22, 2003
10.42(8)*	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)*	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)*	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(6)*	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
10.49(11)*	Strategic Alliance Agreement between the Company and Quest Diagnostics Incorporated dated July 22, 2005
10.50(11)	Stock Purchase Agreement between the Company and Quest Diagnostics Incorporated dated July 22, 2005
10.51(11)	Warrant between the Company and Quest Diagnostics Incorporated dated July 22, 2005
10.52(11)	Credit Agreement between the Company and Quest Diagnostics Incorported dated July 22, 2005
10.53(11)	Security Agreement between the Company and Quest Diagnostics Incorporated dated July 22, 2005
10.54*	Collaborative Research Agreement between University College London, UCL Biomedica plc and Ciphergen Biosystems, Inc. dated September 22, 2005
21.1(10)	Subsidiaries of Registrant
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
24.1	Power of Attorney (see page 97)
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) Incorporated by reference to our Annual Report on Form 10-K filed with the Securities and Exchange Commission for the period ended December 31, 2004, file number 000-31617

(11) Incorporated by reference to our Form 8-K filed with the Securities and Exchange Commission on July 28, 2005

(12) Incorporated by reference to our Form 8-K filed with the Securities and Exchange Commission on October 4, 2005

* 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/ GAIL S. PAGE
President and Chief Executive Officer

Dated: March 17, 2006

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Gail S. Page and Matthew J. Hogan, and each of them, his true and lawful attorneys-in-fact, each with full power of substitution, for him in any and all capacities, to sign any amendments to this report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact or their substitute or substitutes may do or cause to be done by virtue hereof.

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

Signature	Title	Date
/s/ GAIL S. PAGE Gail S. Page	President and Chief Executive Officer, and Director (Principal Executive Officer)	March 17, 2006
/s/ MATTHEW J. HOGAN Matthew J. Hogan	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	March 17, 2006
/s/ DANIEL M. CASERZA Daniel M. Caserza	Vice President and Corporate Controller (Principal Accounting Officer)	March 17, 2006
/s/ JAMES L. RATHMANN James L. Rathmann	Director, Executive Chairman	March 17, 2006
/s/ JOHN A. YOUNG John A. Young	Lead Outside Director	March 17, 2006
/s/ JUDY BRUNER Judy Bruner	Director	March 17, 2006
/s/ JAMES BURNS James Burns	Director	March 17, 2006

/s/ MICHAEL J. CALLAGHAN Michael J. Callaghan	Director	March 17, 2006
/s/ RAJEN K. DALAL, PH.D. Rajen K. Dalal, Ph.D.	Director	March 17, 2006
/s/ WENDELL WIERENGA, PH.D. Wendell Wierenga, Ph.D.	Director	March 17, 2006

SCHEDULE II

CIPHERGEN BIOSYSTEMS, INC.

VALUATION AND QUALIFYING ACCOUNTS

Years Ended December 31, 2005, 2004 and 2003

(in thousands)

	Balance at Beginning of Year	Additions Charged to Earnings	Deductions	Other Changes	Balance at End of Year
Allowance for doubtful accounts:					
31 Dec 2005	$ 247	$ 25	$ 34	$ —	$ 238
31 Dec 2004	553	214	295	(225)	247
31 Dec 2003	344	484	301	26	553
Inventory reserve:					
31 Dec 2005	1,997	594	481	—	2,110
31 Dec 2004	1,338	1,843	219	(965)	1,997
31 Dec 2003	735	691	216	128	1,338
Deferred tax valuation allowance:					
31 Dec 2005	57,196	16,847	—	—	74,043
31 Dec 2004	50,250	6,946	—	—	57,196
31 Dec 2003	34,528	15,722	—	—	50,250

Exhibit 10.39

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT ("Agreement") between Ciphergen Biosystems, Inc., a Delaware corporation (the "Company") and Gail Page ("Executive," and together with the Company, the "Parties") is effective as of December 31, 2005 (the "Effective Date").

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

NOW, THEREFORE, the Parties agree as follows:

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

2. Compensation . The Company will pay Executive a base salary of $350,000 on an annualized basis, payable in accordance with the Company's standard payroll policies, including compliance with applicable tax withholding requirements. In addition, Executive will be eligible for a bonus of up to 50% of Executive's base salary for achievement of reasonable performance-related goals to be defined by the Company's CEO or Board of Directors. The exact payment terms of a bonus, if any, are to be set by the Compensation Committee of the Board of Directors, in its sole discretion. Additionally, the Executive will receive 400,000 options, vested monthly over 48 months, at a grant price of $0.90.

3. Benefits . During the term of Executive's employment, Executive will be entitled to the Company's standard benefits covering employees at Executive's level, including the Company's group medical, dental, vision and term life insurance plans, section 125 plan, employee stock purchase plan and 401(k) plan, as such plans may be in effect from time to time, subject to the Company's right to cancel or change the benefit plans and programs it offers to its employees at any time. In addition, the Executive will receive an annual car allowance or support not to exceed $16,000 per year.

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

5. Termination without Cause or for Good Reason . In the event the Company terminates Executive's employment for reasons other than for Cause (as defined below) or Executive terminates her employment for Good Reason (as defined below), and provided that Executive signs

and does not revoke a standard release of all claims against the Company, and does not breach any provision of this Agreement (including but not limited to Section 10 and Section 11 hereof) or the PIIA, as hereinafter defined, Executive shall be entitled to receive:

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

(ii) immediate, accelerated vesting of 24 months of any options previously granted by the Company to Executive; additionally, Executive will have a 24-month period following the date of termination to exercise any or all of her vested options; and

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

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

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

7. Definitions . For purposes of this Agreement:

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

constitutes a felony in the jurisdiction involved; or (vii) abuse of alcohol or drugs (legal or illegal) that, in the Board of Director's reasonable judgment, materially impairs Executive's ability to perform Executive's duties.

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

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

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

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

10. Conflicting Employment . Executive agrees that, during the term of Executive's employment with the Company and during the Severance Period, Executive will not engage in any other employment, occupation, consulting or other business activity competitive with or directly related to the business in which the Company is now involved or becomes involved during the term of Executive's employment, nor will Executive engage in any other activities that conflict with Executive's obligations to the Company. Executive acknowledges that compliance with the obligations of this paragraph is a condition to Executive's right to receive the severance payments set forth in paragraph 5 above .

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

12. Arbitration and Equitable Relief.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

If to the Company:

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

If to Executive:

Gail Page
c/o Ciphergen Biosystems, Inc.
6611 Dumbarton Circle
Fremont, California 94555

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

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

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

Ciphergen Biosystems, Inc.
a Delaware corporation

By: /s/ JAMES C. RATHMANN

Name: JAMES C. RATHMANN

Title: CHAIRMAN

ACCEPTED AND AGREED TO this
31st day of December, 2005.

/s/ Gail Page
Gail Page

Exhibit 10.54

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

Dated 22 September 2005

(1) **UNIVERSITY COLLEGE LONDON**

(2) **UCL BIOMEDICA PLC**

(3) **CIPHERGEN BIOSYSTEMS, INC**

COLLABORATIVE RESEARCH AGREEMENT

THIS AGREEMENT dated 22 September 2005 is made **BETWEEN:**

(1) **UNIVERSITY COLLEGE LONDON** , whose administrative offices are at Gower Street London, WC1E 6BT ("the University"); and

(2) **UCL BIOMEDICA PLC** , a company registered in England under number 02776963 whose registered office is at c/o Finance Division, University College London, Gower Street, London WC1E 6BT ("UCL Biomedica"); and

(3) **CIPHERGEN BIOSYSTEMS, INC** , a company registered in the United States whose registered office is at 6611 Dumbarton Circle, Fremont, California 94555 ("the Sponsor")

hereinafter each known as "Party" or collectively as "the Parties"

WHEREAS,

(A) Professor Ian Jacobs of the University (the "Principal Investigator") has research objectives that encompass the discovery, validation, and characterization of novel Biomarkers related to ovarian cancer;

(B) The Principal Investigator desires to further such research objectives by collaborating with the Sponsor, a company that has developed a number of technologies that are uniquely enabling in the investigation of Biomarkers, such technologies including, without limitation, Surface Enhanced Laser Desorption/Ionization ("SELDI"), as described in United States Patent Application 08/068,896 and all patents and applications claiming priority thereto including, but not limited to, U.S. Patent No. 5,719,060 and U.S. Patent No. 6,225,047;

(C) T he Sponsor is willing to engage in the Principal Investigator's desired collaboration in exchange for UCL Biomedica's grant of an option to an exclusive licence on terms as further set out in this Agreement with respect to use of discovered Biomarkers in all areas, including without limitation, research, diagnostic, therapeutic, theranostic and/or prophylactic areas throughout the world; and

(D) UCL Biomedica was established for the purpose of protecting and commercially exploiting the results arising from research undertaken by University researchers in the University, or by University researchers in collaboration with other academic institutions or commercial entities;

(E) It is the intention of the University and UCL Biomedica that all Resulting Intellectual Property generated in the course of the Project hereunder that are (1) invented solely by the University shall be owned solely by the University and assigned to UCL Biomedica and (2) jointly invented by the Sponsor and the University, shall be assigned to UCL Biomedica for the purposes of protection and commercial exploitation.

(F) In light of the Sponsor's willingness to collaborate in the discovery, purification, identification and/or validation of Biomarkers and the University's and UCL Biomedica's desire to facilitate the use of the discovered, purified, identified and/or validated Biomarkers in generally available health care products and services, UCL Biomedica is willing to grant to the

Sponsor an option to an exclusive licence on the terms specified in Schedule 3 with respect to the aforementioned Biomarkers throughout the world;

NOW, THEREFORE, in consideration of the foregoing premises and of the faithful performance of the covenants herein contained, the Parties agree as follows:

1 . **DEFINITIONS**

In this Agreement the following expressions have the meaning set opposite:

Academic Publication:	the publication of an abstract, article or paper in a journal, or its presentation at a conference or seminar; and in clauses 6 and 7 “to Publish” and “Publication” are to be construed as references to Academic Publication;
this Agreement:	this document, including its Schedules, as amended from time to time in accordance with clause 11.9;
a Business Day:	Monday to Friday (inclusive) except bank or public holidays;
Biomarker	a substance or characteristic that, measured in certain absolute or relative amounts in blood, other body fluids, or tissues may suggest or be linked with a certain biological, pathogenic, and/or pharmacological process. Examples of known Biomarkers used for the purpose of diagnosing cancer include CA 125 (ovarian cancer), CA 15-3 (breast cancer), CEA (ovarian, lung, breast, pancreas, and GI tract cancers), and PSA (prostate cancer);
Confidential Information:	each Party’s confidential information is: any Background Intellectual Property disclosed by that Party to the other for use in the Project and identified as confidential before or at the time of disclosure; business information; and any Resulting Intellectual Property in which that Party owns the Intellectual Property;
the Effective Date:	1 October 2005;
External Funding:	any funding or assistance provided for the Project, or to any Party for use in the Project by any third party, including without limitation, any state or public body;
the Financial Contribution:	the financial contribution to be provided by the

	Sponsor set out in Schedule 1;
the Research Field:	the field of research and development activities that is directed at the discovery, purification, identification and/or validation of Biomarkers related to breast and ovarian cancer;
the Licensed Field:	the research, development and commercialization of Licensed Products (as that term is defined in Schedule 3) for Diagnostics and Therapeutics for cancer, as more particularly specified in Schedule 3;
a Group Company:	any undertaking which is, on or after the date this Agreement is last signed by a Party hereto from time to time, a subsidiary undertaking of the Sponsor, a parent undertaking of the Sponsor or a subsidiary undertaking of a parent undertaking of the Sponsor, as those terms are defined in section 258 of the Companies Act 1985;
Intellectual Property:	any intellectual property rights in patents, registered designs, copyrights, database rights, design rights, trade marks, application to register any of the aforementioned rights, trade secrets, know-how, rights of confidence and inventions or discoveries;
Resulting Intellectual Property:	any Intellectual Property which is conceived, created, discovered, developed, identified or first reduced to practice in the course of the Project, derived directly from the use of SELDI or from the use of SELDI together with any other technology(ies) and any patents and patent applications, including any continuations, continuations in part, extensions, reissues or divisions thereof and any patents, supplementary protection certificates and similar rights that are based on or derive priority from the foregoing.
Background Intellectual Property:	any Intellectual Property other than Resulting Intellectual Property, used in, or disclosed in connection with the performance of, the Project;
the Key Personnel:	the Principal Investigator, Sponsor's Supervisor and any other key personnel identified in Schedule 2;
the Location:	the location(s) at which the Project will be

	carried out as set out in Schedule 2;
the Principal Investigator:	Ian Jacobs or his successor appointed under clause 10.2;
the Project:	the programme of work described in Schedule 2, as amended from time to time in accordance with clause 11.9;
the Project Period:	the period described in clause 2.1;
Samples	any material provided by the University for use within the Project that is biological or of biological origin;
SELDI	Surface Enhanced Laser Desorption/Ionization, as set forth in Recital B;
the Sponsor's Supervisor:	Dr. Eric Fung or his successor appointed under clause 10.2;
the Territory:	worldwide

2. **THE PROJECT**

2.1 The Project will begin on the Effective Date and will continue for one (1) year or until this Agreement is terminated in accordance with clause 9 or 10, provided that the Sponsor shall have the option of renewing the Project Period for an additional one (1)-year. If this Agreement is entered into after the Effective Date, it will apply retrospectively to work carried out in relation to the Project on or after the Effective Date.

2.2 Each of the parties will carry out the tasks allotted to it in Schedule 2, and will provide the human resources, materials, facilities and equipment that are designated as its responsibility in Schedule 2. The Project will be carried on under the direction and supervision of the Principal Investigator. The Project will be carried out at the Location.

2.3 Although the University will use reasonable endeavours to carry out the Project in accordance with Schedule 2, the University does not undertake that any research will lead to any particular result, nor does it guarantee a successful outcome to the Project.

2.4 The University will provide the Sponsor with quarterly written reports summarising the progress of the Project and a copy of all Resulting Intellectual Property.

2.5 The University warrants to the Sponsor that the University has full power and authority under its constitution, and has taken all necessary actions and obtained all authorisations, licences, consents and approvals, to allow it to enter into this Agreement and to carry out the Project.

3. **FINANCIAL CONTRIBUTION AND EXTERNAL FUNDING**

3.1 The Sponsor will pay the Financial Contribution to the University in accordance with the budget set out in Schedule 1 within 30 days after receipt by the Sponsor of quarterly invoices.

3.2 The Sponsor will also support the Project by providing, where and when appropriate, proprietary operational, bioinformatics software and data analysis support, including data mining using advanced non-linear statistics, pattern recognition algorithms, Deep Proteome™ tools, neural network analyses for the discovery and validation of diagnostic biomarkers and/or profiles, and the supply of standard ProteinChip® Arrays and custom ProteinChip Arrays incorporating surfaces with enhanced binding performance characteristics for discovery and assay development and in acccordance with the budget set out in Schedule 1.

3.3 The University will own all equipment purchased and/or constructed by it, or for it, for use on the Project, using the Financial Contribution or any External Funding.

3.4 All amounts payable to the University under this Agreement are exclusive of VAT (or any similar tax) which the Sponsor will have no obligation to pay.

3.5 External Funding: The University and the Principal Investigator shall be free, at any time:

(a) to engage in internal, non-commercial research outside of the Research Field using SELDI and to seek funding for such research from any source, including without limitation, a commercial sponsor other than the Sponsor. The University acknowledges that use of SELDI is subject to Ciphergen's standard "Label License," which restricts the University's use of SELDI to internal research and specifically prohibits the University's use of SELDI for the benefit of third parties; and

(b) to engage in research inside the Research Field without the use of SELDI, and to seek funding for such research from any source, including without limitation, a commercial sponsor other than the Sponsor; and

(c) to seek additional funding for the Project hereunder from any state or federal agency, private or public foundation (other than foundations owned or operated by a commercial entity other than the Sponsor), provided that the terms and conditions of such additional funding are not in conflict with the terms and conditions of this Agreement including, but not limited to, the Sponsor's rights in and to the Resulting Intellectual Property as defined in Clause 1.

3.6 Governmental Interest . The Parties acknowledge that the University has received, and expects to continue to receive, funding in support of the University's research activities from the national, state and/or local governments where the University is located ("Government Entities"). The Parties acknowledge and agree that their respective rights and obligations pursuant to this Agreement shall be subject to the University's obligations to Government Entities that arise or result from the University's receipt of research support from such Government Entities including, without limitation, the possible University and/or UCL Biomedica obligation to grant to such Government

Entities a non-exclusive, irrevocable, royalty-free license to utilize the Resulting Intellectual Property hereunder for governmental purposes.

4. EXCHANGE OF SAMPLES

In connection with the Project, should the University be required to provide Samples to the Sponsor, the University shall promptly and systematically provide those Samples, under the terms and conditions of the Material Transfer Agreement as set out at Schedule 4. The University represents and warrants that, to the best of its knowledge, the University has obtained and is obtaining Samples in accordance with all applicable laws, regulations and ethical standards and that the University has all necessary rights to dispose of Samples as contemplated herein.

5. **USE AND EXPLOITATION OF INTELLECTUAL PROPERTY**

5.1 This Agreement does not affect the ownership of any Background Intellectual Property. The Background Intellectual Property will remain the property of the Party that contributes said Background Intellectual Property to the Project (or its licensors). No licence to use any Intellectual Property is granted or implied by this Agreement except as expressly granted in this Agreement.

5.2 Each Party grants the other a royalty-free, non-exclusive licence to use its Background Intellectual Property for the purpose of carrying out the Project, but for no other purpose. Neither Party may grant any sub-licence to use the other's Background Intellectual Property except that the Sponsor may allow its Group Companies, and any person working for, or on behalf of the Sponsor or any Group Company, to use the University's Background Intellectual Property for the purpose of carrying out the Project, but for no other purpose.

5.3 Each Party will notify the other promptly after identifying any Resulting Intellectual Property that the disclosing Party believes is patentable, and will supply the other with copies of that Resulting Intellectual Property. UCL Biomedica will notify the Sponsor of other Resulting Intellectual Property in the reports provided under clause 2.4.

5.4 5.4.1 The Resulting Intellectual Property will be owned by the University, who shall assign its rights in it to UCL Biomedica, as specified in Recital E. Where any third party such as a student or contractor is involved in the Project, the University, UCL Biomedica or the Party engaging that contractor (as the case may be) will ensure that that student and that contractor assign any Intellectual Property they may have in the Resulting Intellectual Property in order to be able to give effect to the provisions of this clause 5.

5.4.2 As partial consideration for the grant of the exclusive licence hereunder, the Sponsor may take such steps as it may decide from time to time, but in accordance with clause 5.4.3 below, and at its own expense, to register and maintain in UCL Biomedica's name, any protection for the Resulting Intellectual Property including filing and prosecuting patent applications for any of the Resulting Intellectual Property. Where any employee of the Sponsor is a

co-inventor of such Resulting Intellectual Property, he or she shall be named on said patent applications, as appropriate.

5.4.3 The Sponsor agrees to send UCL Biomedica, in a timely manner, copies of all material correspondence with the Sponsor's patent counsel concerning all patent applications pursuant to clause 5.4.2 above and shall give UCL Biomedica an opportunity to comment thereon before filing with any patent office. The Sponsor shall act upon such solicited UCL Biomedica comments in good faith in the prosecution and maintenance of the patent applications and patents.

5.5 5.5.1 UCL Biomedica grants to the Sponsor an option to take an exclusive licence under all of UCL Biomedica's rights in the Resulting Intellectual Property for any purpose within the Licensed Field and Territory, as defined in clause 1, on the terms specified in Schedule 3 to this Agreement.

5.5.2 [***] This Option Period can be extended by mutual written agreement of the Parties. The Sponsor shall exercise the option by giving written notice thereof to UCL Biomedica at any time during the Option Period.

5.5.3 UCL Biomedica will not, during the Option Period, negotiate with any third party with a view to granting a licence to use the Resulting Intellectual Property or assigning the Intellectual Property in the Resulting Intellectual Property.

5.5.4 Should the Sponsor decide not to take the option to the licence in clause 5.5.1, within the Option Period, UCL Biomedica shall be free to licence the Resulting Intellectual Property as it deems appropriate, save that UCL Biomedica shall not offer a licence to the Resulting Intellectual Property to any other party on more favourable terms than those last offered to the Sponsor, for a period of six (6) months after the Sponsor declines to take the option.

5.6 Subject to clause 3.5, the Principal Investigator shall be free to use the SELDI technology to carry out other work on samples outside the Research Field in the course of his internal, non-commercial research activities at the University to the full extent of the Sponsor's right to use such technology for such purposes. During the term of this Agreement and for a period of 2 (two) years after the termination hereof (the "Sponsor's Rights Period"), the Sponsor shall have the following rights in relation to that work:

5.6.1 Where SELDI is used for other work on Samples collected in the course of carrying out Research Workplan #1 in Schedule 2 (adnexal mass study) outside the Research Field, the Sponsor shall be informed in advance of the nature and scope of the work to be undertaken and shall have the option to sponsor that work. [***] Should the Sponsor elect to exercise such option, the Sponsor shall also have an option to licence the results of the work it sponsors under this clause 5.6.1, on terms identical to those set out in above in this clause 5.

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5.6.2 Where SELDI is used for any other work outside the Research Field, the Sponsor shall be informed in advance of the nature and scope of the work to be undertaken and shall have the option to sponsor that work. [***] Should the Sponsor elect to exercise such option, the Sponsor shall also have an option to licence the results of the work it sponsors under this clause 5.6.2, on fair and reasonable terms to be agreed by the Parties in a separate written agreement.

All obligations of the University pursuant to this clause 5.6 shall cease upon termination of the Sponsor's Rights Period.

5.7 The University and each employee and student of the University will have the irrevocable, royalty-free right to use the Resulting Intellectual Property of the Project for the purposes of academic teaching and academic research only. The rights in this clause are subject to the rules on Academic Publication in clause 6.

6. **ACADEMIC PUBLICATION**

6.1 The Project is undertaken in pursuance of a primary charitable purpose of the University; that is the advancement of education through teaching and research. Therefore, any employee or student of the University (whether or not involved in the Project) may, provided the University has not received a Confidentiality Notice under clause 6.2:

6.1.1 discuss work undertaken as part of the Project in University seminars, tutorials and lectures; and

6.1.2 Publish any of the Resulting Intellectual Property.

6.2 The University will submit to the Sponsor, in writing, details of any Resulting Intellectual Property that any employee or student of the University intends to Publish, at least 30 days before the date of the proposed Publication. The Sponsor may, by giving written notice to the University ("a Confidentiality Notice"), require the University to delay the proposed Publication for a maximum of 3 months after receipt of the Confidentiality Notice if, in the Sponsor's reasonable opinion, that delay is necessary in order to seek patent or similar protection for any Resulting Intellectual Property that is to be Published; or prevent the Publication of any of the Sponsor's Confidential Information. The Sponsor must give that Confidentiality Notice within 15 days after the Sponsor receives details of the proposed Publication. If the University does not receive a Confidentiality Notice within that period, its employee or student may proceed with the proposed Publication, provided that, whether or not it has received a Confidentiality Notice, any of the Sponsor's Background Intellectual Property or Confidential Information may not be published.

6.3 Where, with the agreement of the Sponsor, any registered student of the University has been involved in the Project he will follow the University's regulations for the submission of any thesis or theses for examination. In any event the University will procure that the student will submit a draft thesis to the Principal Investigator and the Sponsor's Supervisor at least 30 days before the date for submission for examination. The Student may not, without the Sponsor's express written consent, include in any

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thesis any of the Sponsor's Background Intellectual Property or Confidential Information, or Resulting Intellectual Property belonging to Sponsor.

7. CONFIDENTIALITY

7.1 Subject to clause 6, neither Party will disclose to any third party, other than to its Group Companies, nor use for any purpose except carrying out the Project, any of the other Party's Confidential Information.

7.2 Neither Party will be in breach of any obligation to keep any Background Intellectual Property, Resulting Intellectual Property or other information confidential or not to disclose it to any other party to the extent that it:

7.2.1 is known to the Party making the disclosure before its receipt from the other Party, and not already subject to any obligation of confidentiality to the other Party;

7.2.2 is or becomes publicly known without any breach of this Agreement or any other undertaking to keep it confidential;

7.2.3 has been obtained by the Party making the disclosure from a third party in circumstances where the Party making the disclosure has no reason to believe that there has been a breach of an obligation of confidentiality owed to the other Party;

7.2.4 has been independently developed by the Party making the disclosure;

7.2.5 is disclosed pursuant to the requirement of any law or regulation (provided, in the case of a disclosure under the Freedom of Information Act 2000, none of the exceptions to that Act applies to the information disclosed) or the order of any Court of competent jurisdiction, and the Party required to make that disclosure has informed the other, within a reasonable time after being required to make the disclosure, of the requirement to make the disclosure and the information required to be disclosed; or

7.2.6 is approved for release in writing by an authorised representative of the other Party.

7.3 The University will not be in breach of any obligation to keep any of the Resulting Intellectual Property owned by or licensed to the Sponsor, or other information, confidential or not to disclose them to any third party, by Publishing any of the same if the University has followed the procedure in clause 6.2 and has received no Confidentiality Notice within the period stated in that clause.

7.4 The Sponsor will not be in breach of any obligation to keep any of the Resulting Intellectual Property owned by the University, the University's Background Intellectual Property, or other information, confidential or not to disclose them to any third party, by making them available to any Group Company or any person working for or on behalf of the Sponsor or a Group Company, who needs to know the same in order to exercise the rights granted in clause 5.5, provided they are not used except as expressly permitted by this Agreement and the recipient undertakes to keep that

Background Intellectual Property, the Resulting Intellectual Property or that information confidential.

7.5 If the University receives a request under the Freedom of Information Act 2000 to disclose any information that, under this Agreement, is the Sponsor's Confidential Information, it will notify the Sponsor and will consult with the Sponsor. The Sponsor will respond to the University within 10 days after receiving the University's notice if that notice requests the Sponsor to provide information to assist the University to determine whether or not an exemption to the Freedom of Information Act applies to the information requested under that Act.

7.6 Neither the University nor the Sponsor will use the other's name or logo in any press release or product advertising, or for any other promotional purpose, without first obtaining the other's written consent; except that the University may identify the sums received from the Sponsor in the University's Annual Report and similar publications.

8. LIMITATION OF LIABILITY

8.1 Each of the parties warrants to the other that, to the best of its knowledge and belief as of the Effective Date (having made reasonable enquiry of those of its employees involved in the Project or likely to have relevant knowledge, and in the case of the University any student involved in the Project, but not having made any search of any public register) any advice or information given by it or any of its employees or students who work on the Project, or the content or use of any Resulting Intellectual Property, Background Intellectual Property or materials, works or information provided in connection with the Project, will not constitute or result in any infringement of third-party rights.

8.2 Except under the warranty in clause 8.1 and the indemnity in clause 8.3, and subject to clause 8.6, neither Party accepts any responsibility for any use which may be made by the other Party of any Resulting Intellectual Property, nor for any reliance which may be placed by that other Party on any Resulting Intellectual Property, nor for advice or information given in connection with any Resulting Intellectual Property.

8.3 The Sponsor will indemnify the University and UCL Biomedica (the UCL Indemnified Parties), and keep them fully and effectively indemnified, against each and every claim made against any of the UCL Indemnified Parties as a result of the Sponsor's use of any of the Resulting Intellectual Property or any materials, works or information received from them pursuant to the terms of this Agreement. The University and UCL Biomedia will indemnify the Sponsor and its Group Companies (the Sponsor Indemnified Parties), and keep them fully and effectively indemnified, against each and every claim made against any of the Sponsor Indemnified Parties as a result of any breach of the University's representations and warranties hereunder or the University's provision or use of any of the Samples, Resulting Intellectual Property or any materials, works or information received from the Sponsor pursuant to the terms of this Agreement. The Indemnified Party must:

8.3.1 promptly notify the indemnifying Party of details of the claim;

8.3.2 not make any admission in relation to the claim;

8.3.3 allow the indemnifying Party to have the conduct of the defence or settlement of the claim; and

8.3.4 give the indemnifying Party all reasonable assistance (at the indemnifying Party's expense) in dealing with the claim.

The indemnity in this clause will not apply to the extent that the claim arises as a result of any Indemnified Party's negligence, breach of clause 7 or the deliberate breach of this Agreement.

8.4 Subject to clause 8.6, and except under the indemnity in clause 8.3, the liability of either Party to the other for any breach of this Agreement, any negligence or arising in any other way out of the subject matter of this Agreement, the Project and the Resulting Intellectual Property, will not extend to any indirect damages or losses, or any loss of profits, loss of revenue, loss of data, loss of contracts or opportunity, whether direct or indirect, even if the Party bringing the claim has advised the other of the possibility of those losses, or if they were within the other Party's contemplation.

8.5 Subject to clause 8.6, and except under the indemnity in clause 8.3, the aggregate liability of each Party to the other for all and any breaches of this Agreement, any negligence or arising in any other way out of the subject matter of this Agreement, the Project and the Resulting Intellectual Property, will not exceed in total the Financial Contribution.

8.6 Nothing in this Agreement limits or excludes either Party's liability for:

8.6.1 death or personal injury;

8.6.2 any fraud or for any sort of liability that, by law, cannot be limited or excluded; or

8.6.3 any loss or damage caused by a deliberate breach of this Agreement or a breach of clause 7.

8.7 The express undertakings and warranties given by the parties in this Agreement are in lieu of all other warranties, conditions, terms, undertakings and obligations, whether express or implied by statute, common law, custom, trade usage, course of dealing or in any other way. All of these are excluded to the fullest extent permitted by law.

9. FORCE MAJEURE

If the performance by either Party of any of its obligations under this Agreement (except a payment obligation) is delayed or prevented by circumstances beyond its reasonable control, that Party will not be in breach of this Agreement because of that delay in performance. However, if the delay in performance is more than 6 months, the other Party may terminate this Agreement with immediate effect by giving written notice.

10. TERMINATION

10.1 Either Party may terminate this Agreement with immediate effect by giving notice to the other Party if:

10.1.1 the other Party is in breach of any material provision of this Agreement and (if it is capable of remedy) the breach has not been remedied within 30 days after receipt of written notice specifying the breach and requiring its remedy; or

10.1.2 the other Party becomes insolvent, or if an order is made or a resolution is passed for its winding up (except voluntarily for the purpose of solvent amalgamation or reconstruction), or if an administrator, administrative receiver or receiver is appointed over the whole or any part of the other Party's assets, or if the other Party makes any arrangement with its creditors.

10.2 Each of the parties will notify the other in writing within 5 (five) business days after receipt of formal notice that any of the Key Personnel appointed by that Party (the "Notifying Party") is unable or unwilling to continue to be involved in the Project. Such notice will also state the date of termination of such Key Personnel's involvement in the Project and nominate a successor to replace such departing Key Personnel. If the parties are unable to agree on a successor acceptable to the other Party, either Party may terminate this Agreement by giving the other not less than 3 months' written notice.

10.3 The Sponsor may also terminate this Agreement, by giving the University not less than 3 months' written notice, if the Sponsor determines, in its reasonable judgment, that the Resulting Intellectual Property does not justify continuing the Project.

10.4 Clauses 1, 4, 5 (except clause 5.5 if the University terminates this Agreement under clause 10.1), 6, 7, 8, 9, 10.4, 10.5 and 11 will survive the expiry of the Project Period or the termination of this Agreement for any reason and will continue indefinitely.

10.5 On the termination of this Agreement, the Sponsor will pay the University for all work done prior to termination, as mutually agreed by the Parties, including any uncancellable or unavoidable expenditures to which the Sponsor has agreed in advance of such expenditure. Subject to 10.6 below, if the Sponsor has paid any of the Financial Contribution in advance and the whole of that contribution has not, by the end of the Project Period or the termination of this Agreement, been used by the University for the purposes for which that Financial Contribution was provided, the University will return to the Sponsor the unused portion of that contribution.

10.6 If the Sponsor terminates this Agreement under clause 10.3[***] The University shall take all reasonable steps to minimise those costs.

11. **GENERAL**

11.1 **Notices:** Any notice to be given under this Agreement must be in writing, may be delivered to the other Party or parties by any of the methods set out in the left hand

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column below, and will be deemed to be received on the corresponding day set out in the right hand column:

Method of service	Deemed day of receipt
By hand or courier	the day of delivery
By pre-paid first class post	the second Business Day after posting
By recorded delivery post	the next Business Day after posting
By fax (provided the sender's fax machine confirms complete and error-free transmission of that notice to the correct fax number)	the next Business Day after sending or, if sent before 16.00 (sender's local time) on the Business Day it was sent

The parties' respective representatives for the receipt of notices are, until changed by notice given in accordance with this clause, as follows:

For the University:	For the Sponsor:
Trish Monaghan Contract Manager Contract Research Office UCL Business The Network Building 97 Tottenham Court Road London W1T 4TP	Gail Page President Diagnostics Division Ciphergen Biosystems, Inc. 6611 Dumbarton Circle Fremont, California 94555 USA
Fax number:00 44 20 7679 9801	Fax number: 510.505.2101

11.2 **Headings:** The headings in this Agreement are for ease of reference only; they do not affect its construction or interpretation.

11.3 **Assignment:** Neither Party may assign or transfer this Agreement as a whole, or any of its rights or obligations under it, without first obtaining the written consent of the other Party, which consent may not be unreasonably withheld or delayed. Notwithstanding the above, the Sponsor may at its own discretion, and without approval by the University or UCL Biomedica, transfer its interest or any part thereof under this Agreement to a wholly-owned subsidiary or partnership of which the Sponsor is the general partner or any assignee or purchaser of the portion of the Sponsor's business associated with the licences and rights granted under this Agreement. In the event of any such transfer, the transferee shall assume and be bound by the provisions of this Agreement.

11.4 **Illegal/unenforceable provisions:** If the whole or any part of any provision of this Agreement is void or unenforceable in any jurisdiction, the other provisions of this Agreement, and the rest of the void or unenforceable provision, will continue in force in

that jurisdiction, and the validity and enforceability of that provision in any other jurisdiction will not be affected.

11.5 **Waiver of rights:** If a Party fails to enforce, or delays in enforcing, an obligation of the other Party, or fails to exercise, or delays in exercising, a right under this Agreement, that failure or delay will not affect its right to enforce that obligation or constitute a waiver of that right. Any waiver of any provision of this Agreement will not, unless expressly stated to the contrary, constitute a waiver of that provision on a future occasion.

11.6 **No agency:** Nothing in this Agreement creates, implies or evidences any partnership or joint venture between the parties, or the relationship between them of principal and agent. Neither Party has any authority to make any representation or commitment, or to incur any liability, on behalf of the other.

11.7 **Entire agreement:** This Agreement constitutes the entire agreement between the parties relating to its subject matter. Each Party acknowledges that it has not entered into this Agreement on the basis of any warranty, representation, statement, agreement or undertaking except those expressly set out in this Agreement. Each Party waives any claim for breach of this Agreement, or any right to rescind this Agreement in respect of, any representation which is not an express provision of this Agreement. However, this clause does not exclude any liability which either Party may have to the other (or any right which either Party may have to rescind this Agreement) in respect of any fraudulent misrepresentation or fraudulent concealment prior to the execution of this Agreement.

11.8 **Formalities:** Each Party will take any action and execute any document reasonably required by the other Party to give effect to any of its rights under this Agreement, or to enable their registration in any relevant territory provided the requesting Party pays the other Party's reasonable expenses.

11.9 **Amendments:** No variation or amendment of this Agreement will be effective unless it is made in writing and signed by each Party's representative.

11.10 **Third parties:** No one except a Party to this Agreement has any right to prevent the amendment of this Agreement or its termination, and no one except a Party to this Agreement may enforce any benefit conferred by this Agreement, unless this Agreement expressly provides otherwise.

11.11 **Governing law:** This Agreement is governed by, and is to be construed in accordance with, English law. The English Courts will have exclusive jurisdiction to deal with any dispute which has arisen or may arise out of, or in connection with, this Agreement, except that either Party may bring proceedings for an injunction in any jurisdiction.

11.12 **Escalation:** If the parties are unable to reach agreement on any issue concerning this Agreement or the Project within 14 days after one Party has notified the other of that issue, they will refer the matter to the Commercial Director, UCL Business in the case of the University, and to the President, Diagnostics Division in the case of the Sponsor in an attempt to resolve the issue within 14 days after the referral. Either Party may bring proceedings in accordance with clause 11.11 if the matter has not been resolved within that 14 day period, and either Party may apply to the court for an injunction, whether or not any issue has been escalated under this clause.

SIGNED for and on behalf of the University:

Name Dr. J.D. Skinner

Position Commercial Director

Signature

Date

SIGNED for and on behalf of the Sponsor:

Name Gail Page

Position President and COO

Signature

Date

SIGNED for and on behalf of UCL Biomedica:

Name C.A. Tarhan

Position Managing Director

Signature

Date

SCHEDULE 1

The Financial Contribution

1. ADNEXAL MASS STUDY - COLLECTION INCLUDING SAMPLE PREPARATION

A. CONTRIBUTION TO STAFF COSTS

Staff	Annual salary with on costs	FTE	No of yrs	Total Cost	Ciphergen Contribution YR1	Ciphergen Contribution YR2
Research fellow	40000	2	2	£ 160,000.00		
Research Nurses (G 27)	33348	0.5	2	£ 33,348.00		
Research assistant (1A)	40000	1	2	£ 80,000.00		
Laboratory manager (MTO4 Spinal 34)	35000	0.5	2	£ 35,000.00		
Laboratory technician (MLA)	18000	1	2	£ 36,000.00		
Database manager (ALC3 Sp 17)	44558	0.2	2	£ 17,823.20		
Research Nurses (G 27)	33348	0.5	2	£ 333,480.00		
Laboratory technician (MTO2 Sp Point 22)	24906.5	1	2	£ 49,813.00		
Consultant histopathologist	80000	0.2	2	£ 32,000.00		
Total Ciphergen contribution		Over two years	**2**	**£ 777,464**	**£ 100,000**	**£ 100,000**

B. CONTRIBUTION TO CONSUMABLES COSTS

Consumables	Comments	Cost per unit (£)	No of units	Total Cost	Total Ciphergen contribution
Pt information		0.2	9000	£ 1,800.00	£ 900.00
Pt consent form		0.15	9000	£ 1,350.00	£ 0.00
Office supplies	For GCRC			£ 3,000.00	£ 2,000.00
ONS flagging of cancer pts	For operator flagging and copy of death certificate	2.15	2000	£ 4,300.00	£ 0.00
Recruitment costs	Adverts	1200	6	£ 7,200.00	£ 7,200.00
Blood tubes for cases	Maybe less - cannot use Beckton Dickson tube which costs approx £6 per tube	3	5000	£ 15,000.00	£ 13,800.00
Transport of case samples	4 collections on dry ice per centre (every 6 months)	250	80	£ 20,000.00	£ 14,000.00
Sample storage consumables				£ 26,250.00	£ 26,250.00
TRL lab supplies (Eppendorf, pipette etc)				£ 4,000.00	£ 4,000.00
DNA extraction kits		10	8000	£ 80,000.00	£ 0.00
Paraffin slide section / tissue block for cases		15	2500	£ 37,500.00	£ 37,500.00
Travel budget	Between centres for set up and occasionally data audit			£ 5,000.00	£ 1,000.00
Meetings etc		3000	4	£ 12,000.00	£ 12,000.00
PCs		1000	20	£ 20,000.00	£ 13,000.00
80 freezer at each centre		5400	10	£ 54,000.00	£ 54,000.00
Refrigerated centrifuge		2200	10	£ 22,000.00	£ 0.00
Webbased database				£ 25,000.00	£ 25,000.00
Total	Over two years			**£ 338,400**	**£ 210,650**

2. PROTEOMICS TEAM + EQUIPMENT (studies involving UKCTOCS and adnexal mass)

A. CASH AWARD

Staff	FTE	Salary (approx)*	Total Cost YR1	Total Cost YR2	Ciphergen Contribution YR1	Ciphergen Contribution YR2
Proteomics Team						
Senior scientist	1	£ 45,000.00	£ 45,000.00	£ 45,000.00		
PhD student	1	£ 15,000.00	£ 15,000.00	£ 15,000.00		
Biostatistician	1	£ 60,000.00	£ 60,000.00	£ 60,000.00		
Total salary costs			**£ 120,000**	**£ 120,000**	**£ 60,000**	**£ 60,000**
For consumables			**£ 30,000**	**£ 30,000**	**£ 30,000**	**£ 30,000**

B. In kind AWARD

		YR1	YR2
ProteinChip reader, arrays, and associated consumables and software	For carryiny out SELDI analysis	£ 300,000.00	£ 70,000.00

TOTAL RESEARCH AWARD FROM CIPHERGEN

	TOTAL	Ciphergen Contribution YR1	Ciphergen Contribution YR2
CASH	£ 590,650.00	£ 295,325.00	£ 295,325.00
UCL OVERHEAD heading 1A	£ 200,000.00	£ 100,000.00	£ 100,000.00
UCL OVERHEAD heading 2A	£ 120,000.00	£ 60,000.00	£ 60,000.00
IN KIND	£ 370,000.00	£ 300,000.00	£ 70,000.00
TOTAL	**£ 1,280,650.00**		

SCHEDULE 2

The Project

RESEARCH WORKPLAN #1

Title of Research Workplan : University College London (UCL)-Ciphergen collaboration in the field of gynecologic disease. This Research Workplan #1 is intended to identify biomarkers that may aid in the diagnosis of an adnexal mass. Research Workplan #2 is intended to determine the pre-analytical variables and quality of serum integrity of samples taken under the UK screening trial; it is intended to provide the preliminary data required to justify a larger analysis of samples taken from this trial.

For the avoidance of doubt University College London will be the custodians of the samples collected using funding provided under this Agreement, for the adnexal mass study described in Research Workplan #1. No rights of ownership in respect of these samples will pass to Ciphergen.

Objectives : This project aims to find diagnostic biomarkers for the differential diagnosis of an adnexal mass.

Location: Translational Research Laboratory and Clinical Research Centre, Institute for Women's Health, UCL

UCL Researchers: Dr. Ian Jacobs and Dr. Usha Menon.

Ciphergen Researchers : Dr. Eric Fung.

Diagnostic Biomarkers Discovery Study

Monetary or In-kind Contributions : Ciphergen will contribute cash and in-kind support, as outlined in the budget in Schedule 1 and clause 3.2 of this Agreement. The values for array consumables are estimates; Ciphergen will provide the arrays necessary to complete the project.

Samples or Materials to be Transferred :

1. Preliminary Analysis to Ascertain Most Effective Method of Sample Collection and Transport to Laboratory . UCL will collect blood from a set of 50 healthy volunteers and collect serum and plasma under varying conditions from each patient, including one tube of serum in standard SST tubes, one tube of serum in the Becton Dickinson proteomics serum sample collection tube, and one tube of EDTA plasma. UCL and Ciphergen will perform analyses of these samples to determine the effect of tube type, incubation at room temperature, and other pre-analytical variables on proteomic profiles. Ciphergen will provide expertise in the form of factorial design of experiments to plan this study.

2. Initial Biomarker Discovery Study . Based on this preliminary analysis, UCL will collect blood (pre- and post-op), urine, and baseline data from women presenting with an adnexal mass.

The urine will be collected according to the following parameters:

Urine will be collected at the day of surgery.
The patients will be NPO commencing at midnight on the day of surgery.
The urine samples will be aliquotted in 2 ml cryovials and stored in a -80 freezer.

Patients will be monitored so that a final anatomic diagnosis can be obtained. It is expected that no fewer than 500 women (patients with malignant and benign ovarian neoplasms and healthy controls) will be enrolled in this study by the end of the first year of the project.

Work to be Conducted : UCL and Ciphergen will perform protein expression profiling according to Ciphergen's best practices, including novel proteomic technologies such as Ciphergen's Deep Proteome™ tools. Ciphergen will, in collaboration with the UCL adnexal mass study group, perform univariate and multivariate statistical analyses to determine the optimal multi-marker panel for the differential diagnosis of an adnexal mass. The adnexal mass study group will take active part in the evaluation of the performed protein expression profiles.

2. Diagnostic Biomarkers Purification and Identification Study

Samples or Materials to be Transferred : UCL will provide adequate amounts of the required serum samples (approximately 5-10 samples, 400-1ml of each) for the purification and identification of biomarkers resulting from the Diagnostic Biomarkers Discovery Study in Part 1 above based on evaluation of the results of such study by Ciphergen and the adnexal mass study group.

Work to be Conducted : Ciphergen and UCL will purify the biomarkers using chromatography procedures and identify the biomarkers using peptide fingerprinting and/or tandem mass spectrometry. The number of biomarkers and the specific biomarkers to be purified will be mutually agreed upon by UCL and Ciphergen, and will consist of the markers that are deemed to provide the highest classification power.

3. Diagnostic Biomarkers Validation Study

Samples or Materials to be Transferred:

Work to be Conducted : Ciphergen staff will work with the UCL scientist(s) to co-develop a high-throughput diagnostic assay for biomarkers mutually agreed upon in the Diagnostic Biomarkers Discovery Study. This assay will then be performed in the research setting at UCL on samples maintained within the adnexal mass program.

Anticipated Timeline : The study will start as soon as possible after execution of the Collaborative Research Agreement after completion of recruitment of a mutually agreed on number of women for the Diagnostic Biomarkers Discovery Study. Recruitment is scheduled to last for 2 years from the start at any particular centre. At such time as an adequate number of samples have been collected, protein expression profiling may commence. Samples may continue to be collected for purposes of independent and prospective validation.

RESEARCH WORKPLAN #2

Title of Research Workplan : Preliminary analysis of pre-analytical variables and integrity of samples obtained from the UKCTOCS. Research Workplan #1 is intended to identify biomarkers that may aid in the diagnosis of an adnexal mass. This Research Workplan #2 is intended to determine the pre-analytical variables and quality of serum integrity of samples taken under the UK screening trial; it is intended to provide the preliminary data required to justify a larger analysis of samples taken from this trial. For the avoidance of doubt University College London will be the custodians of the samples referred to in Research Workplan #2. No rights of ownership in respect of these samples will pass to Ciphergen.

Location: Translational Research Laboratory and Clinical Research Centre, Institute for Women's Health, UCL

UCL Researchers : Dr. Ian Jacobs and Dr. Usha Menon.

Ciphergen Researchers : Dr. Eric Fung.

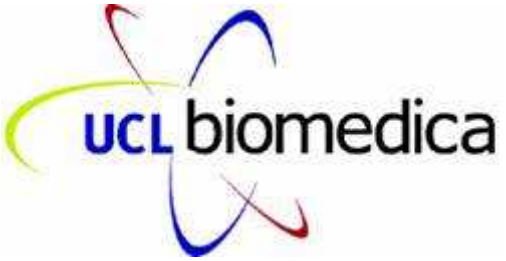
Monetary or In-kind Contributions : Ciphergen will contribute cash and in-kind support, as outlined in the budget in Schedule 1 and clause 3.2 of this Agreement. The values for array consumables are estimates; Ciphergen will provide the arrays necessary to complete the project.

Age	50-54	55-59	60-64	65-69	70-74
No. of women	**20**	**20**	**20**	**20**	**20**
2001 samples	20	20	20	20	20
2002 samples	20	20	20	20	20
2003 samples	20	20	20	20	20
Total samples/assays	**60**	**60**	**60**	**60**	**60**

Samples will be chosen randomly to include representative samples from various collecting institutions and time in transit to the central repository.

Analysis: Proteomic studies will provide spectral data sets for data analysis to identify consistent features in the 'normal' proteomic pattern in healthy postmenopausal women (sample set Ia) and variations in the 'normal' proteomic pattern which are attributable to age, increasing years post menopause and use of hormone replacement therapy (sub groups of sample set Ia). Once the 'normal' serum proteomic pattern has been characterised, further analysis will document the changes in the proteomic pattern over time in the same women (serial samples in set Ia from 2001, 2002 and 2003). As the time (hours) between venepuncture and serum separation UKCTOCS is well documented (range 2 hours – 56 hours it will also be possible to assess the impact of this variable. In addition the performance of each proteomic technology in terms of intraassay and interassay variability for spectral peaks identified as consistent features in the 'normal' SELDI pattern will be assessed based on replicate analysis of these samples.

SCHEDULE 3
Agreed Licence Terms



Licence agreement

THIS AGREEMENT is made the 22 nd day of September 2005.

BETWEEN:

(1) UCL BIOMEDICA PLC, (the 'Owner') a company incorporated in England and Wales under company registration number 02776963 whose principal place of business is at C/o Finance Division, University College London, Gower Street, London WC1E 6BT, UK and

(2) CIPHERGEN BIOSYSTEMS, INC., (the 'Licensee') a Delaware corporation having its principal place of business at 6611 Dumbarton Circle, Fremont, California 94555, U.S.A

RECITALS:

(1) The Owner is the registered proprietor of, or applicant for, the Patents and possesses related Resulting Intellectual Property.

(2) The Owner is willing to grant to the Licensee, and the Licensee is willing to accept, a licence under the Patents and a licence to use the Resulting Intellectual Property, in accordance with the provisions of this Agreement.

IT IS AGREED as follows:

1. Definitions

In this Agreement, the following words shall have the following meanings:

'Analyte Specific Reagents' means any antibodies, both polyclonal and monoclonal, specific receptor proteins, protein ligands, nucleic acid sequences, and similar reagents which, through specific binding or chemical reaction with substances in a specimen,

	are intended for use in a diagnostic application for identification and quantification of an individual chemical substance or ligand in biological specimens
‘Biomarker’	means a substance or characteristic that, measured in certain absolute or relative amounts in blood, other body fluids, or tissues may suggest or be linked with a certain biological, pathogenic, and/or pharmacological process. Examples of known Biomarker used for the purpose of diagnosing cancer include CA 125 (ovarian cancer), CA 15-3 (breast cancer), CEA (ovarian, lung, breast, pancreas, and GI tract cancers), and PSA (prostate cancer).
‘Collaborative Research Agreement’	Means the Collaborative Research Agreement between University College London, UCL BioMedica Plc and Ciphergen Biosystems, Inc dated 22 September 2005.
‘Commencement Date’	1 October 2005.
‘Disposable Component’	means any item that is either a General Purpose Reagent or an Analyte Specific Reagent and specifically excluding any capital equipment or software of any kind. Such capital equipment or software includes, any ProteinChip® Systems, ProteinChip® Software, Biomarker Patterns ™ Software, CiphergenExpress ™ Software and any software that embodies a classification algorithm that is used in performing a Diagnostic Test
‘Diagnostics’	means any product or service that is optimized for specific biomarker or biomarker pattern detection or otherwise optimized to perform a specific assay, purification or separation process including, without limitation, for diagnostic or theranostic purposes including, without limitation, for purposes of diagnosis of disease, prognosis of disease, prognosis of treatment, monitoring of disease and monitoring of treatment. “Theranostic” means a diagnostic test intended to predict the utility of a therapeutic regimen in managing a condition, by way of example but not of limitation, for disease risk prediction, disease diagnosis, disease prognosis, patient stratification,

	therapeutic stratification and monitoring therapeutic response.
‘Diagnostic Test’	means any test method performed for Diagnostic purposes. ‘
‘Diagnostic Test Kit’	means a collection of Disposable Components with instructions for performing one or more Diagnostic Test, which collection is approved for sale by the relevant government regulatory agency in the jurisdiction of sale.
‘General Purpose Reagent’	means any chemical reagent that has general laboratory application, that is used to collect, prepare, and examine specimens from the human body for diagnostic purposes, and that is not labelled or otherwise intended for a specific diagnostic application. It may be either an individual substance, or multiple substances reformulated, which, when combined with or used in conjunction with an appropriate Analyte Specific Reagent and other General Purpose Reagents, is part of a diagnostic test procedure or system constituting a finished in vitro diagnostic (IVD) test. General Purpose Reagents are appropriate for combining with one or more than one Analyte Specific Reagent in producing such systems and include labware or disposable constituents of tests; but they do not include laboratory machinery, automated or powered systems. General Purpose Reagents include cytological preservatives, decalcifying reagents, fixatives and adhesives, tissue processing reagents, isotonic solutions and pH buffers. Reagents used in tests for more than one (1) individual chemical substance or ligand are General Purpose Reagents [e.g., Thermus aquaticus (TAQ) polymerase, substrates for enzyme immunoassay (EIA)].
‘a Group Company ’	any undertaking which is, on or after the Commencement Date of this Agreement, a subsidiary undertaking of the Licensee, a

	parent undertaking of the Licensee or a subsidiary undertaking of a parent undertaking of the Licensee, as those terms are defined in section 258 of the Companies Act 1985;
'Issued Licensed Patents'	means Licensed Patents that have issued and that are not in any manner still pending.
'Laboratory'	The laboratory of the 'Principal Investigator' (Professor Ian Jacobs) within University College London's Department of Gynaecological Oncology.
'Licensed Field'	The research, development and commercialization of Licensed Products for Diagnostics and Therapeutics for cancer.
'Licensed Products'	Any and all processes, products and services practiced, sold or otherwise supplied by the Licensee or a Group Company of Licensee or its sub-licensee, and which Licensed Products or the use of such Licensed Products are within any Valid Claim of the Licensed Patents in the jurisdiction in which such Licensed Products are sold. A Licensed Product may include, without limitation a Diagnostic Test Kit, a Diagnostic Test, a Medical Implement or a Therapeutic.
'Licensed Technology'	means Resulting Intellectual Property and Licensed Patents.
'Medical Implement'	means a medical implement used in the delivery of a Therapeutic or in Theranostic or Diagnostic applications, and which may include, specialized probes, catheters, imaging equipment, or similar process.
'Net Receipts'	The amounts received by the Licensee or its Group Companies from the grant of sub-licences under the Licensed Patents, less any Value Added Tax or other sales tax, based on the timing of cash received and irrespective of whether the amounts may be immediately recognized as revenue or must be treated as deferred under the accounting principles generally accepted in

	the United States of America. Net Receipts shall not include any (a) up-front non-recurring payments, (b) annual and/or milestone payments and (c) amounts received by Licensee or its Group Companies from a sub-licensee in consideration of conducting research or development work.
‘Net Sales Value’	The gross revenue (as recognized under accounting principles generally accepted in the United States of America), which has been actually collected (in the form of cash or equivalent) by the Licensee or its Group Companies on direct sales of Licensed Products to independent third parties in arm’s length transactions exclusively for money or, where the sale is not at arm’s length, the price that would have been so invoiced if it had been at arm’s length, after deduction of normal trade discounts actually granted and any credits actually given, and, provided the amounts are separately charged on the relevant invoice any costs of packaging, insurance, carriage and freight, any value added tax or other sales tax, and any import duties or similar applicable government levies. Notwithstanding the above: Transfer or provision of a product or service by the Licensee to a Group company for later sale, use or further licensing by such Group Company for the use, consumption by or benefit of an end customer shall not be considered a sale for the purpose of calculating Net Sales Value; and in the case of such a transfer, the only amount to be included in the calculation of Net Sales Value shall be the net sales price (calculated in accordance with exclusions and exceptions analogous to those set forth herein with respect to determining Net Sales Value) received by the Group Company from its end customer for such product or service; and The following types of transfers or provision of any product or service, and any associated consideration received therefore, shall not be included in Net Sales Value: (a) transfers for the assurance of product testing or control, (b) promotional

	distribution to potential users, provided that the Licensee shall use reasonable commercial efforts to limit distribution of Licensed Products for promotional purposes to no more than 25% (twenty-five percent) of the total volume of Licensed Products sold during any calendar year during the term of this Agreement, (c) distribution to researchers by or on behalf of the Licensee or any of its Group Companies or (4) disclosure or dissemination for obtaining regulatory approvals.
‘Parties’	The Owner and the Licensee, and ‘Party’ shall mean either of them.
‘Licensed Patents’	Any and all of the patents and patent applications referred to in Schedule 1, including any continuations, continuations in part, extensions, reissues, divisions, and any patents, supplementary protection certificates and similar rights that are based on or derive priority from the foregoing.
‘Project’	the programme of work described in Schedule 3, as amended from time to time in accordance with clause 10.9 of the Collaborative Research Agreement.
‘Resulting Intellectual Property’	has the meaning given such term in Clause 1 of the Collaborative Research Agreement;
‘SELDI’	Surface Enhanced Laser Desorption/Ionization, as set forth in Recital B of the Collaborative Research Agreement.
‘Territory’	The World.
‘Therapeutic’	means any drug, pharmaceutical, protein, polypeptide, peptide, nucleic acid, small molecule, gene therapy, vaccine, other substance or process that is used for the treatment of a disease or health condition.
‘Valid Claim’	A claim of a patent or patent application that has not expired or

been held invalid or unenforceable by a court of competent jurisdiction in a final and non-appealable judgement.

2. Grant of rights

2.1 Licences

The Owner hereby grants to the Licensee, subject to the provisions of this Agreement, an exclusive licence, with the right to sub-license, subject to clause 2.3 below, under the Licensed Technology to develop, manufacture, use, sell, offer for sale and/or import Licensed Product(s) and any improvement thereto, or have done any of these on its behalf and otherwise exploit the Licensed Technology, but only in the Licensed Field in the Territory.

2.2 Formal licences

The Parties shall execute such formal licences as may be necessary or appropriate for registration with Patent Offices and other relevant authorities in particular territories. In the event of any conflict in meaning between any such licence and the provisions of this Agreement, the provisions of this Agreement shall prevail wherever possible. Prior to the execution of the formal licence (s) (if any) referred to in clause 2.2, the Parties shall so far as possible have the same rights and obligations towards one another as if such licence(s) had been granted. The Parties shall use reasonable endeavours to ensure that, to the extent permitted by relevant authorities, this Agreement shall not form part of any public record.

2.3 Sub-licensing

The Licensee shall be entitled to grant sub-licences of its rights under this Agreement to any person, provided that:

2.3.1 the royalties and other consideration provided for in the sub-licence shall be at an amount or rate which is not less than the amount or rate applicable to direct sales or sublicensing, as appropriate, provided for in this Agreement;

2.3.2 the sub-licence shall include obligations on the sub-licensee which are equivalent to the obligations on the Licensee under this Agreement;

2.3.3 the Licensee shall not undertake any obligations pursuant to any sub-licence granted by the Licensee hereunder which, in the Licensee’s reasonable judgment, would be deemed unduly onerous by the Owner;

2.3.4 within 60 days of the grant of any sub-licence the Licensee shall provide to the Owner a true copy of it; and

2.3.5 the Licensee shall be responsible for any breach of the sub-licence by the sub-licensee, as if the breach had been that of the Licensee under this Agreement, and the Licensee

shall indemnify the Owner against any loss, damages, costs, claims or expenses which are awarded against or suffered by the Owner as a result of any such breach by the sub-licensee.

2.3.6 Any sublicence granted by the Licensee as part of a sublicence agreement made between the Licensee and a sublicensee in accordance with the provisions of this Clause 2.3 ("Sublicence Agreement") shall survive the termination of this Agreement as a direct licence between the Owner and the sublicensee subject to the provisions of such sublicence agreement and the following conditions:

(a) at the time of such termination the sublicensee is not in breach of any material provision of its sublicense agreement with the Licensee and none of the situations referred to in Clause 8.2.2(b) of this Agreement applies to the sublicensee; and

(b) within 60 days of receiving notice of the termination of this Agreement, the sublicensee notifies the Owner in writing that it wishes the sublicence agreement to continue in effect in accordance with the terms thereof and undertakes to the Owner to comply with the sublicensee's obligations under such sublicence agreement.

2.4 Reservation of rights

The Owner reserves the non-exclusive right to use the Licensed Technology in the Licensed Field solely for the purposes of academic research and teaching.

2.5 No other licence

It is acknowledged and agreed that no licence is granted by the Owner to the Licensee other than the licence(s) expressly granted by the provisions of this clause 2.

2.6 Quality

The Licensee shall ensure that all of the Licensed Products sold by it and its sub-licensees are of satisfactory quality and comply with all applicable laws and regulations in each part of the Territory.

3. Confidential information

3.1 Responsibility for development of Licensed Products

The Licensee shall be exclusively responsible for the technical and commercial development and manufacture of Licensed Products and for incorporating any modifications or developments thereto that may be necessary or desirable and for all Licensed Products sold or supplied, and accordingly the Licensee shall indemnify the Owner in accordance with the terms of clause 7.3.

3.2 Confidentiality obligations

Each Party ('Receiving Party') undertakes:

3.2.1 to maintain as secret and confidential all Resulting Intellectual Property and other technical, scientific or commercial information (collectively "Confidential Information") obtained directly or indirectly from the other Party ('Disclosing Party') in the course of or in anticipation of this Agreement and to respect the Disclosing Party's rights therein,

3.2.2 to use the same exclusively for the purposes of this Agreement, and

3.2.3 to disclose the same only to those of its Group Companies, employees, contractors and sub-licensees pursuant to this Agreement (if any) to whom and to the extent that such disclosure is reasonably necessary for the purposes of this Agreement provided that any such recipients are bound by obligations of non-use and confidentiality at least as stringent as those contained herein.

3.3 Exceptions to obligations

The provisions of clause 3.2 shall not apply to Confidential Information which the Receiving Party can demonstrate by reasonable, written evidence:

3.3.1 was, prior to its receipt by the Receiving Party from the Disclosing Party, in the possession of the Receiving Party and at its free disposal; or

3.3.2 is subsequently disclosed to the Receiving Party without any obligations of confidence by a third party who has not derived it directly or indirectly from the Disclosing Party; or

3.3.3 is or becomes generally available to the public through no act or default of the Receiving Party or its agents, employees, Group Company or sub-licensees; or

3.3.4 the Receiving Party is required to disclose to the courts of any competent jurisdiction, or to any government regulatory agency or financial authority, provided that the Receiving Party shall:

(a) inform the Disclosing Party as soon as is reasonably practicable, and

(b) at the Disclosing Party's request use reasonable efforts to seek to persuade the court, agency or authority to have the information treated in a confidential manner, where this is possible under the court, agency or authority's procedures; or

3.3.5 in the case of information disclosed by the Owner to the Licensee, is disclosed to actual or potential customers for Licensed Products in so far as such disclosure is reasonably necessary to promote the sale or use of Licensed Products, provided that the customers sign a written confidentiality undertaking substantially similar to clauses 3.2 and 3.3.

3.4 Disclosure to employees

The Receiving Party shall procure that all of its Group Companies, employees, contractors and sub-licensees pursuant to this Agreement (if any) who have access to any of the Disclosing Party's information to which clause 3.2 applies, shall be made aware of these obligations and shall have entered into written undertakings of confidentiality substantially similar to clauses 3.2 and 3.3 and which apply to the Disclosing Party's information.

4. Payments

4.1 Royalties. Subject to This Agreement, the Licensee shall pay royalties to the Owner as follows:

4.1.1 Sale of Diagnostic Test Kits. If the Licensee or its Group Company sells to a third party a Diagnostic Test Kit that is a Licensed Product covered by an Issued Licensed Patent, then the Licensee shall pay to the Owner a [***] percent ([***]%) royalty on Net Sales Value of such Diagnostic Test Kits.

4.1.2 Sale of Disposable Components for Inclusion in Diagnostic Test Kits . If (i) the Licensee or its Group Company sells, either directly or indirectly, to a third party any Disposable Component, (ii) such third party, pursuant to any necessary sublicense from the Licensee or its Group Company under an Issued Licensed Patent, includes such Disposable Component in a Diagnostic Test Kit for sale, and (iii) such Diagnostic Test Kit is a Licensed Product covered by an Issued Licensed Patent, then the Licensee shall pay to the Owner a [***] percent ([***]%) royalty on Net Sales Value of such Disposable Components.

4.2.3 Sale of Disposable Components for use in performing a Diagnostic Test, but not for inclusion in a Diagnostic Test Kit offered for sale. If (i) the Licensee or its Group Company sells, either directly or indirectly, to a third party any Disposable Component, (ii) such third party does not include such Disposable Component in a Diagnostic Test Kit for sale, but instead uses such Disposable Component in performing a Diagnostic Test as part of a service for a fee, (iii) such third party has obtained any necessary sublicense

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

to perform such Diagnostic Test from the Licensee or its Group Company under an Issued Licensed Patent, and (iv) such Diagnostic Test is a Licensed Product covered by an Issued Licensed Patent, then the Licensee shall pay to the Owner a [***] percent ([***]%) royalty on Net Sales Value of such Disposable Components.

4.2.4 Grant of a sublicense to manufacture and sell a Diagnostic Test Kit with no associated sale of Disposable Components. If (i) the Licensee or its Group Company grants to a third party a sublicense to manufacture and sell a Diagnostic Test Kit, (ii) such Diagnostic Test Kit is a Licensed Product covered by an Issued Licensed Patent, and (iii) neither the Licensee nor any of its Group Companies sells either directly or indirectly to such third party any Disposable Components that are sold as part of such Diagnostic Test Kit, then the Licensee shall pay to the Owner [***] percent ([***]%) of the Net Receipts for such sublicense.

4.2.5 Grant of a sublicense to perform a Diagnostic Test with no Associated Sale of Diagnostic Test Kits or Disposable Components . If: (i) the Licensee or its Group Company grants to a third party a sublicense to sell a service involving the performance of a Diagnostic Test, (ii) such Diagnostic Test is a Licensed Product covered by an Issued Licensed Patent, and (iii) neither the Licensee nor any of its Group Companies sells either directly or indirectly to such third party any Diagnostic Test Kits or Disposable Components for use in the performance of such Diagnostic Test, then the Licensee shall pay to the Owner [***] percent ([***]%) of the Net Receipts for such sublicense.

4.2.6 Performance of Diagnostic Test by the Licensee or its Group Company . If the Licensee or its Group Company sells a service involving the performance of a Diagnostic Test, which Diagnostic Test is a Licensed Product covered by an Issued Licensed Patent, then the Licensee shall pay to the Owner [***] ([***]%) on Net Sales Value of such Diagnostic Test

4.2.7 Grant of sublicense to commercialise a Therapeutic or Medical Implement . If the Licensee or its Group Company grants to a third party a sublicense to commercialise a Therapeutic or a Medical Implement that is a Licensed Product covered by an Issued Licensed Patent, then the Licensee shall pay to the Owner [***] percent ([***]%) of the Net Receipts for such sublicense.

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

4.2.8 Exclusions and Limitations

(a) No Royalties on Software or Capital Equipment . In no case shall Licensee or its Group Company pay to UCL Biomedica any royalties or other fees for the sale of capital equipment or software, including without limitation: ProteinChip® Readers, ProteinChip® Software, Biomarker Patterns ™ software, CiphergenExpress ™ Software and any software that embodies a classification algorithm that is used in performing a Diagnostic Test. The full amounts received in connection with periodic deliveries of Disposable Components or Diagnostic Test Kits under a "Reagent Rental Plan" (a method for customers to pay for capital equipment or software over a series of periodic amortized payments in connection with periodic shipments of specialized Diagnostic Test Kits or Disposable Components that are used on or in connection with the capital equipment and software) shall not be used in determining Net Sales. Instead, in determining Net Sales of such Diagnostic Test Kits or Disposable Components, the full amounts received in connection with periodic deliveries under a "Reagent Rental Plan" shall be adjusted so as to deduct the amortized cost of software and capital equipment that have been allocated along with the true charges for such Diagnostic Test Kits or Disposable Components in the Reagent Rental Plan. Ultimately, Net Sales of Diagnostic Test Kits or Disposable Components should reflect only those amounts actually attributable to such products, as if such products were sold on a stand-alone basis.

(b) No Royalties on Licenses to Patents or Licensed Patents that are Not Issued Licensed Patents .
(i) In no case shall Licensee or its Group Company pay to UCL Biomedica any royalties for the grant of a license to any patent that is not an Issued Licensed Patent. For example, but not by way of limitation, any consideration received for a license grant under a Baylor University-owned SELDI patent or a Licensee-owned Retentate Chromatography patent shall not trigger any royalty obligation to UCL Biomedica, even if such grant may be necessary in the manufacture, sale or use of any Diagnostic Test Kit or in the performance of any Diagnostic Test.

(ii) In no case shall Licensee or its Group Company pay UCL Biomedica any royalties for the grant of a license to any Licensed Patent that is not an Issued Licensed Patent. Notwithstanding the above, once there is an Issued Licensed Patent in a given country or jurisdiction, the Licensee shall pay royalties to UCL Biomedica on sales of Licensed Products in such country or jurisdiction (i) retroactively on a lump sum basis from the date of first commercial sale of such

Licensed Products, if any, through the date of issuance of such Issued Licensed Patent Patent ("Licensed Patent Issue Date") and (ii) on a prospective basis, in accordance with this clause 4.2. Licensee shall make such retroactive payment in accordance with subclause (i) above within 60 (sixty) days after such Licensed Patent Issue Date. Ciphergen shall use take reasonable steps to ensure that its patent counsel prosecute Licensed Patents in a diligent manner.

(c) No Royalty owed on Revenue Received in Exchange for Performance of Product or Service Development and/or Marketing Activities . Under no circumstances shall Licensee or its Group Companies be liable to UCL Biomedica for royalties on revenue received in consideration of product or service development and/or marketing activities.

(d) One Royalty Per Transaction . Only one royalty shall be due and payable to UCL Biomedica by the Licensee on the sale of any product or service subject to a royalty under this Agreement regardless of the number of Licensed Patents or Licensed Patent claims that may cover any such product or service, its manufacture and/or use. Moreover, if the performance of any service that triggers a royalty hereunder requires the use of a product, the sale of which triggers a royalty hereunder, only the one royalty of higher value among the two royalties triggered shall be due and payable to UCL Biomedica by the Licensee.

(e) No Other Royalties Owed . Except as explicitly set forth herein, neither the Licensee nor its Group Companies shall pay to UCL Biomedica any royalties under this Agreement.

4.3 Combination Products

Proportional sharing of royalties in cases of multi-Biomarker-based Diagnostic Tests with multiple intellectual property owners . In the event that any royalty-bearing event hereunder involves a Diagnostic Test that employs any Biomarkers (as defined herein below) on which royalties are owed to a third party (a "Third Party Licensor"), Net Sales (or Net Receipts from sublicensing, as applicable) for such royalty-bearing event shall be reduced to reflect the proportion of Biomarkers on which royalties are owed to a Party hereunder ("Collaborative Research Biomarkers") as opposed to Biomarkers on which royalties are owed to a Third Party Licensor ("Third Party Biomarkers"). Specifically, Net Sales (or Net Receipts, as applicable) for such royalty-bearing event shall be reduced by multiplying the fraction A over A+B where "A" is

the number of Collaborative Research Biomarkers covered by Issued Licensed Patents and "B" is the number of Third Party Biomarkers.

4.4 In the event that, due to market conditions, the royalty paid to the Owner constitutes a reduction in the return realised by the Licensee such that the reduction diminishes the Licensee's capability to be profitable or competitive with respect to the sale, provision or use of any Licensed Product, the Owner agrees to consider a reasonable reduction in the royalty paid to the Owner in such cases for the period during which such market condition exists. Factors determining the size of the reduction will include, without limitation, the Licensee's then-current profit margin on such Licensed Products.

4.5 If the Licensee or any of its Group Companies is required to pay a royalty or royalties to any obtain a licence from any third party licensor ("Third Party Licence") for technology that is not a Biomarker in connection with the manufacture, use, practice, sale, or marketing of a Licensed Product hereunder, at the Licensee's sole discretion, the royalties payable under this Agreement shall be reduced by (a) the amount of royalties paid under the Third Party Licence *or* (b) 50% *or* (c) royalties paid under the Third Party Licence shall be treated as a deductible item when calculating Net Sales Value provided that the amount of royalty payable by the Licensee to the Owner in any semi-annual period shall not be reduced by more than 50% of the amount which would have been payable in the absence of this clause.

4.6 Payment terms

Royalties due under this Agreement shall be calculated and paid semiannually as of June 30 th and December 31 st for the six (6)-month period prior to such respective date and shall be paid semiannually within 60 days next following such respective date, in respect of sales of Licensed Products made during such six (6)-month period and within 60 days of the termination of this Agreement.

4.7 All sums due under this Agreement:

4.7.1 are exclusive of Value Added Tax which will be paid by the Licensee only if the Licensee is required to do so pursuant to applicable law;

4.7.2 shall be paid in pounds sterling by bank transfer:

Barclays Bank Plc – Bloomsbury & Tottenham Court Road Branch
PO Box 11345
London W12 8GG

Sort Code: 20 10 53
Account No: 30782270

Account name: UCL BioMedica Plc
Swift Code BARCGB22

or cheque made payable to UCL BioMedica Plc and in the case of sales or sub-licence income received by the Licensee in a currency other than pounds sterling, the royalty shall be calculated in the other currency and then converted into equivalent pounds sterling at the buying rate of such other currency as quoted by Barclays Bank plc in London as at the close of business on the last business day of the quarterly period with respect to which the payment is made;

4.7.3 subject to clause 1 (definition of "Net Sales Value") shall be made without deduction of income tax or other taxes charges or duties that may be imposed, except insofar as the Licensee is required to deduct the same to comply with applicable laws. The Parties shall co-operate and take all steps reasonably and lawfully available to them, at the expense of the Owner, to avoid deducting such taxes and to obtain double taxation relief. If the Licensee is required to make any such deduction it shall provide the Owner with such certificates or other documents as it can reasonably obtain to enable the Owner to obtain appropriate relief from double taxation of the payment in question; and

4.7.4 shall be made by the due date, failing which the Owner may charge interest on any outstanding amount on a daily basis at a rate equivalent to 1% above the most favourable Bank of England base rate then in force.

4.8 If at any time during the continuation of this Agreement the Licensee is prohibited from making any of the payments required hereunder by a governmental authority in any country then the Licensee will within the prescribed period for making the said payments in the appropriate manner use its best endeavours to secure from the proper authority in the relevant country permission to make the said payments and will make them within 30 (thirty) days of receiving such permission. If such permission is not received within 30 (thirty) days of the Licensee making a request for such permission then, at the option of the Owner, the Licensee shall deposit the royalty payments due in the currency of the relevant country either in a bank account designated by the Owner within such country or such royalty payments shall be made to an associated company of the Owner designated by the Owner and having offices in the relevant country designated by the Owner.

4.9 Royalty statements

The Licensee shall send to the Owner at the same time as each royalty payment is made in accordance with clause 4.2 a statement setting out, in respect of each territory or region in which Licensed Products are sold, the types of Licensed Product sold, the quantity of each type sold,

and the total Net Sales Value in respect of each type, expressed both in local currency and pounds sterling and showing the conversion rates used, during the period to which the royalty payment relates.

4.10 Records

4.10.1 The Licensee shall keep at its normal place of business detailed and up to date records and accounts showing the quantity, description and value of Licensed Products sold by it, and the amount of Net Receipts received by it in respect of Licensed Products, on a country by country basis, and being sufficient to ascertain the royalties due under this Agreement.

4.10.2 The Licensee shall make such records and accounts available, on reasonable notice but no more than once each year, for inspection during business hours by an independent chartered accountant nominated by the Owner for the purpose of verifying the accuracy of any statement or report given by the Licensee to the Owner under this clause 4.10. The accountant shall be required to keep confidential all information learnt during any such inspection, and to disclose to the Owner only such details as may be necessary to report on the accuracy of the Licensee's statement or report. The Owner shall be responsible for the accountant's charges unless the accountant certifies that there is an inaccuracy of more than 5% per cent in any royalty statement, in which case the Licensee shall pay his charges in respect of that inspection.

4.10.3 The Licensee shall ensure that the Owner has the same rights as those set out in this clause 4.10 in respect of any sub-licensee of the Licensee which is sub-licensed under the Licensed Patents pursuant to this Agreement.

5. Commercialisation

5.1 The Licensee shall diligently proceed to develop and commercially exploit Licensed Products to the maximum extent worldwide.

5.2 Without prejudice to the generality of the Licensee's obligations under clause 5.1, the Licensee shall provide at least annually to the Owner an updated, written Development Plan, showing all past, current and projected activities taken or to be taken by the Licensee to bring Licensed Products to market and maximise the sale of Licensed Products worldwide. The Owner's receipt or approval of any such plan shall not be taken to waive or qualify the Licensee's obligations under clause 5.1.

5.3 If the Owner considers at any time during the period of this Agreement that the Licensee has without legitimate reason failed to proceed diligently to develop and commercially exploit Licensed Products, the Owner shall so notify the Licensee in writing. By not later than 10 (ten) days after Licensee's receipt of such notice, the parties shall commence informal discussions with the goal of reaching a mutually acceptable resolution of the matter. If the parties have not been able to arrive at such resolution within 3 (three) months after commencement of such negotiations, either Party shall be entitled to refer the matter to an alternative dispute resolution ("ADR") process, in accordance with Schedule 2.

6 Intellectual property

6.1 Maintain the Licensed Patents

The Licensee shall at his own cost and expense pay all expenses associated with the preparation and filing of patent applications in accordance with clause 5.4 of the Collaborative Research Agreement and pay all maintenance and renewal fees in respect of the Licensed Patents as and when due; provided that if the Licensee wishes to abandon any patent application or not to maintain any such Licensed Patent (or to cease funding any such application or Licensed Patent) it shall give 3 months' prior written notice thereof to the Owner and on the expiry of such notice period the Licensee shall cease to be licensed under the patent application or Licensed Patent identified in the notice.

6.2 Infringement of the Licensed Patents

6.2.1 Each Party shall inform the other Party promptly if it becomes aware of any infringement or potential infringement of any of the Licensed Patents, and the Parties shall consult with each other to decide the best way to respond to such infringement.

6.2.2 If the Parties fail to agree on a joint programme of action, including how the costs of any such action are to be borne and how any damages or other sums received from such action are to be distributed, then the Licensee shall be entitled to take action in its own name against the third party at its sole expense and it shall be entitled to all damages or other sums received from such action, after reimbursing the Owner for any reasonable expenses incurred in assisting it in such action. The Owner may agree to be joined in any suit to enforce such rights and shall have the right to be separately represented by its own counsel at its own expense. If the alleged infringement is both within and outside the Licensed Field, the Parties shall also co-operate with the Owner's other licensees (if any) in relation to any such action.

6.3 Infringement of third party rights

6.3.1 If any warning letter or other notice of infringement is received by a Party, or legal suit or other action is brought against a Party, alleging infringement of third party rights in the manufacture, use or sale of any Licensed Product, that Party shall promptly provide full details to the other Party, and the Parties shall discuss the best way to respond.

6.3.2 The Licensee shall have the right but not the obligation to defend such suit and shall have the right to settle with such third party, provided that if any action or proposed settlement involves the making of any statement, express or implied, concerning the validity of any Patent, the consent of the Owner must be obtained before taking such action or making such settlement.

7. Warranties and liability

7.1 Warranties by owner

The Owner warrants, represents and undertakes as follows:

7.1.1 it is the absolute and unencumbered owner of the Licensed Patents and has caused its directors and employees to execute such assignments of the Licensed Patents as may be necessary to give title to the Licensed Patents to the Owner; and

7.1.2 it has not done, and will not do nor agree to do during the continuation of this Agreement, any of the following things if to do so would be inconsistent with the exercise by the Licensee of the rights granted to it under this Agreement, namely:

(a) grant or agree to grant any rights in the Licensed Patents or any improvements thereto; or

(b) assign, mortgage, charge or otherwise transfer any of the Licensed Patents or (subject to clause 7.2 below) any of its rights or obligations under this Agreement; and

(c) it is not aware that any third party owns or claims any rights in the Licensed Patents; and

(d) it is not aware (but without having carried out any investigation other than asking the Principal Investigator and the Owner's patent agents for their understanding of the position) that any third party owns or claims that it owns any rights which would be infringed by use of the Licensed Patents in accordance with the provisions of this Agreement.

7.2 No other warranties

7.2.1 Each of the Licensee and the Owner acknowledges that, in entering into this Agreement, it does not do so in reliance on any representation, warranty or other provision except as expressly provided in this Agreement, and any conditions, warranties or other terms implied by statute or common law are excluded from this Agreement to the fullest extent permitted by law.

7.2.3 Without limiting the scope of clause 7.2.1, the Owner does not give any warranty, representation or undertaking:

(a) as to the efficacy or usefulness of the Licensed Technology; or

(b) that any of the Licensed Patents is or will be valid or subsisting or (in the case of an application) will proceed to grant; or

(c) that the use of any of the Licensed Technology, the manufacture, sale or use of the Licensed Products or the exercise of any of the rights granted under this Agreement will not infringe any other intellectual property or other rights of any other person; or

(d) that the Resulting Intellectual Property or any other information communicated by the Owner to the Licensee under or in connection with this Agreement will produce Licensed Products of satisfactory quality or fit for the purpose for which the Licensee intended; or

(e) as imposing any obligation on the Owner to bring or prosecute actions or proceedings against third parties for infringement or to defend any action or proceedings for revocation of any of the Licensed Patents; or

(f) as imposing any liability on the Owner in the event that any third party supplies Licensed Products to customers located in the Territory.

7.3 Indemnity

The Licensee shall indemnify the Owner against any loss, damages, costs or expenses which are awarded against or incurred by the Owner as a result of any claim concerning the use by the Licensee or any of its sub-licensees of the Licensed Technology or otherwise in connection with the manufacture, use or sale of or any other dealing in any of the Licensed Products by the Licensee or its Group Companies or any of its sub-licensees.

7.4 Liability

Notwithstanding any other provision of this Agreement, no Party shall be liable to any other Party to this Agreement in contract, tort, negligence, breach of statutory duty or otherwise for any loss, damage, costs or expenses of any nature whatsoever incurred or suffered by that

other Party or its Group Companies of an indirect or consequential nature including without limitation any economic loss or other loss of turnover, profits, business or goodwill. Each Party's liability for direct damages hereunder shall be limited to the total amount of royalties paid by the Licensee to the Owner at the time the event giving rise to any such liability occurs.

8 Duration and termination

8.1 Commencement and termination by expiry

This Agreement, and the licences granted hereunder, shall come into effect on the Commencement Date and, unless terminated earlier in accordance with this clause 8, shall continue in force on a country by country basis until the later of:

8.1.1 The date of expiration of the last to expire patent included within the Issued Licensed Patents in each such country, or

8.2.2 The tenth anniversary of the Commencement Date;
and on such date the licences granted hereunder with respect to the affected country shall terminate automatically.

8.2 Early termination

8.2.1 The Licensee may terminate this Agreement at any time on 90 days' prior notice in writing to the Owner.

8.2.2 Without prejudice to any other right or remedy, either Party may terminate this Agreement at any time by notice in writing to the other Party ('Other Party'), such notice to take effect as specified in the notice:

(a) if the Other Party is in breach of any material provision of this Agreement and, in the case of a breach capable of remedy within 90 days, the breach is not remedied within 90 days of the Other Party receiving notice specifying the breach and requiring its remedy; or

(b) if the Other Party becomes insolvent, or if an order is made or a resolution is passed for the winding up of the Other Party (other than voluntarily for the purpose of solvent amalgamation or reconstruction), or if an administrator, administrative receiver or receiver is appointed in respect of the whole or any part of the Other Party's assets or business, or if the Other Party makes any composition with its creditors or takes or suffers any similar or analogous action in consequence of debt.

8.2.3 The Owner may forthwith terminate this Agreement by giving written notice to the Licensee if the Licensee or its Affiliate or sub-licensee commences legal proceedings, or assists any third party to commence legal proceedings, to challenge the validity of any of the Licensed Patents.

8.3 Consequences of termination

8.3.1 Upon termination of this Agreement by expiry under clause 8.1 above, the Licensee shall have the non-exclusive right to use the Resulting Intellectual Property without charge or other obligation to the Owner.

8.3.2 Upon termination of this Agreement for any reason:

(a) the Licensee and its sub-licensees shall be entitled to sell, use or otherwise dispose of (subject to payment of royalties under clause 4) any unsold or unused stocks of the Licensed Products for a period of 1 (one) year following the date of termination;

(b) subject to clauses 8.1 and 8.3.1 above, the Licensee shall no longer be licensed to use or otherwise exploit in any way, either directly or indirectly, the Licensed Patents, in so far and for as long as any of the Licensed Patents remains in force or the Resulting Intellectual Property;

(c) subject to paragraph 8.3.1 above, the Licensee shall consent to the cancellation of any formal licence granted to it, or of any registration of it in any register, in relation to any of the Licensed Patents; and

(d) Except as provided in this clause 8.3.2 and 8.3.3 and 8.3.4, and except in respect of any rights that may have accrued prior to termination of this Agreement, neither Party shall be under any further obligation to the other.

9. General

9.1 Force majeure

Neither Party shall have any liability or be deemed to be in breach of this Agreement for any delays or failures in performance of this Agreement which result from circumstances beyond the reasonable control of that Party, including without limitation labour disputes involving that Party. The Party affected by such circumstances shall promptly notify the other Party in writing when such circumstances cause a delay or failure in performance and when they cease to do so.

9.2 Amendment

This Agreement may only be amended in writing signed by duly authorised representatives of the Owner and the Licensee.

9.3 Assignment and third party rights

9.3.1 Subject to clause 9.3.2 below, neither Party shall assign, mortgage, charge or otherwise transfer any rights or obligations under this Agreement, nor any of the Licensed Patents or rights under the Licensed Patents, without the prior written consent of the other Party, which consent shall not unreasonably be with held.

9.3.2 Either Party may assign all [or part] of its rights and obligations under this Agreement together with its rights in the Licensed Patents to a wholly-owned subsidiary or partnership of which such Party is the general partner or any company to which it transfers all [or part] of its assets or business, PROVIDED that the assignee undertakes to the other Party to be bound by and perform the obligations of the assignor under this Agreement. However a Party shall not have such a right to assign this Agreement if it is insolvent or any other circumstance described in clause 8.2.2(b) applies to it.

9.4 Waiver

No failure or delay on the part of either Party to exercise any right or remedy under this Agreement shall be construed or operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy preclude the further exercise of such right or remedy.

9.5 Invalid clause

If any provision or part of this Agreement is held to be invalid, amendments to this Agreement may be made by the addition or deletion of wording as appropriate to remove the invalid part or provision but otherwise retain the provision and the other provisions of this Agreement to the maximum extent permissible under applicable law.

9.6 No agency

Neither Party shall act or describe itself as the agent of the other, nor shall it make or represent that it has authority to make any commitments on the other's behalf.

9.7 Interpretation

In this Agreement:

9.7.1 the headings are used for convenience only and shall not affect its interpretation;

9.7.2 references to persons shall include incorporated and unincorporated persons; references to the singular include the plural and *vice versa* ; and references to the masculine include the feminine;

9.7.3 references to clauses and Schedules mean clauses of, and schedules to, this Agreement; and

9.7.4 references to the grant of 'exclusive' rights shall mean that the person granting the rights shall neither grant the same rights (in the same Licensed Field and Territory) to any other person, nor exercise those rights directly to the extent that and for as long as the Licensed Products are within Valid Claims of unexpired Licensed Patents.

9.8 Notices

9.8.1 Any notice to be given under this Agreement shall be in writing and shall be sent by express courier or personal delivery, first class mail or air mail, or by fax (confirmed by first class mail or air mail) to the address of the relevant Party set out at the head of this Agreement, or to the relevant fax number set out below, or such other address or fax number as that Party may from time to time notify to the other Party in accordance with this clause 9.8. The fax numbers of the Parties are as follows: Owner +44 (0) 20 7679 9838; Licensee 510.505.2101, attention President Diagnostics Division.

9.8.2 Notices sent as above shall be deemed to have been received on the date delivered if sent via express courier or otherwise delivered personally, three working days after the day of posting (in the case of inland first class mail), or seven working days after the date of posting (in the case of air mail), or on the next working day after transmission (in the case of fax messages, but only if a transmission report is generated by the sender's fax machine recording a message from the recipient's fax machine, confirming that the fax was sent to the number indicated above and confirming that all pages were successfully transmitted).

9.9 Law and Jurisdiction

The validity, construction and performance of this Agreement shall be governed by English law and shall be subject to the exclusive jurisdiction of the English courts to which the parties hereby submit, except that a Party may seek an interim injunction in any court of competent jurisdiction.

9.10 Further action

Each Party agrees to execute, acknowledge and deliver such further instruments, and do all further similar acts, as may be necessary or appropriate to carry out the purposes and intent of this Agreement.

9.11 Announcements

Neither Party shall make any press or other public announcement concerning any aspect of this Agreement, or make any use of the name of the other Party in connection with or in consequence of this Agreement, without the prior written consent of the other Party.

9.12 Entire agreement

This Agreement, including its Schedules, sets out the entire agreement between the Parties relating to its subject matter and supersedes all prior oral or written agreements, arrangements or understandings between them relating to such subject matter. The Parties acknowledge that they are not relying on any representation, agreement, term or condition which is not set out in this Agreement.

10. Third parties

This Agreement does not create any right enforceable by any person who is not a party to it ('Third Party') under the Contracts (Rights of Third Parties) Act 1999, but this clause does not affect any right or remedy of a Third Party which exists or is available apart from that Act.

AGREED by the Parties through their authorised signatories:

For and on behalf of UCL Biomedica plc	For and on behalf of Ciphergen Biosystems, Inc.
signed	signed
print name	print name
title	title
date	date

Schedule 1

The Licensed Patents

Schedule 2

Alternative Dispute Resolution

Alternative Dispute Resolution . For any and all claims, disputes, or controversies arising under, out of, or in connection with this Agreement, including any dispute relating to patent validity or infringement, which the Parties shall be unable to resolve within sixty (60) days, the Party raising such dispute shall promptly advise the other Party of such claim, dispute or controversy in a writing that describes in reasonable detail the nature of such dispute. By not later than ten (10) business days after the recipient has received such notice of dispute, each Party shall have selected for itself a representative who shall have the authority to bind each such Party and shall additionally have advised the other Party in writing of the name and title of such representative. By not later than twenty (20) business days after the date of such notice of dispute, such representatives shall select a mutually agreed upon independent expert schedule a date for engaging in an ADR process. Thereafter, the representatives of the Parties shall engage in good faith in an ADR process. If the representatives of the Parties have not been able to resolve the dispute within thirty (30) business days after the termination of the ADR, the Parties shall have the right to pursue any other remedies legally available to resolve such dispute in the English courts, to whose jurisdiction for such purposes the Owner and the Licensee each irrevocably consents and submits. Notwithstanding the foregoing, nothing in this Schedule 2 shall be construed to waive any rights or timely performance of any obligations existing under this Agreement. The costs of such ADR process shall be borne equally by the Parties.

SCEHDULE 4

Material Transfer Agreement

UNIVERSITY COLLEGE LONDON

Gower Street London WC1E 6BT

MATERIAL TRANSFER AGREEMENT

UNIVERSITY COLLEGE LONDON has collected and/or developed the materials known as: (*Insert description of materials below*)

[To be completed] ("Materials")

Providing University College London Scientist is: (*Insert name and department*)

Professor Ian Jacobs Department of Gynaecological Oncology
(the "Provider")

Company Scientist is: (*Insert name*)

[To be completed]
(the "Company Scientist")

The Company Scientist is an employee of: (*Insert company name and full address*)

Ciphergen Biosystems, Inc. a Delaware corporation having its principal place of business at 6611 Dumbarton Circle, Fremont, California 94555, U.S.A
(the "Company")

The Company wishes to acquire a sample of the Materials for academic research relating to: (*Insert description of academic research for which Materials are to be used*)

The "Project" as defined in clause 1 of the Collaborative Research Agreement between UCL, UCL BioMedica Plc and Ciphergen Biosystems, Inc dated 2005

(the "Collaborative Research Agreement")

UCL is willing to provide a sample of the Materials for the Project Period (the "Term") as defined in clause 2.1 of the Collaborative Research Agreement on the Terms and Conditions shown overleaf provided the Company agrees to comply with those Terms and Conditions.

Standard Terms and Conditions for Release of Materials

UCL represents and warrants to Company that, to the best of its knowledge (a) the Materials have been obtained by UCL in accordance with all applicable laws, rules and regulations, (b) UCL has all necessary rights to transfer and dispose of the Materials as contemplated herein and (c) the transfer, shipment and delivery of the Materials to Company shall be made in such a manner and by such means as to ensure the biological and/or chemical integrity of the Materials and the safety of Company's employees, agents and contractors.

Company shall keep the Materials secure at the Company's laboratory and ensure that access to the Materials is restricted to the Company Scientist and his authorised co-workers. In this Agreement "the Materials" shall include any and all materials, documents and information that UCL may provide to the Company under or in connection with this Agreement, and any derivatives, portions, progeny or improvements.

The Company shall use the Materials only for the Project and not for any other purpose even if those purposes are being pursued in the Company's laboratory without the prior written consent of UCL.

The Company shall not supply the Materials to any party other than its Group Companies (as defined in the Collaborative Research Agreement).

The Term may be extended with the written agreement of the parties.

The Company shall acknowledge UCL as the source of the materials in any publication that mentions them. The Company shall send UCL a copy of any reports or publications which describe work carried out using the Materials, and UCL shall be entitled to use all such reports and publications subject to the provisions of the Collaborative Research Agreement.

The Materials and any copies thereof made by or in the possession of or under the control of the Company pursuant to this Agreement shall remain under the custody of UCL and shall be immediately returned or if UCL so requires, destroyed, provided that UCL acknowledges and understands that (a) the Materials may be partially or totally damaged, destroyed, consumed or otherwise rendered unusable for any other purpose in the course of the Project and (b) Company may not be able to return some or all of the received Materials upon completion of the Project.

on termination of this Agreement, and

in the event that the Company is in breach of any of the conditions of this Agreement, and

at any other time on request of UCL and request and any copies thereof made by or in the

possession of or under the control of the Company pursuant to this Agreement. If UCL so dictates the Material should be destroyed under the circumstances that might arise under this Clause 6.

UCL shall at all times remain the custodian of the materials and which will not be removed from the Company's address. No licence under any UCL intellectual property is granted or implied by this Agreement.

In the event that the Company makes or observes any new discovery, improvement or invention ("Invention") relating to the Materials or as a direct result of the Project then the Company will bring this to the attention of UCL and such Invention shall be subject to the provisions of the Collaborative Research Agreement.

The Company shall use the Materials in accordance with good laboratory practice and the highest standards of skill and care and shall ensure compliance with any applicable laws and regulations governing the transportation, keeping or use of the Materials.

The Company shall reimburse UCL for any reasonable shipping and related costs that may be incurred when preparing and sending the Materials to the Company.

The Materials are experimental in nature and, subject to UCL's representations and warranties set forth above, UCL makes no representation and gives no warranty or undertaking, in relation to them. As examples, but without limiting the foregoing, UCL give no warranty:

that use of the Materials will not infringe any patent, copyright, trade mark or other right owned by any third party; or

that the Materials are of merchantable or satisfactory quality or fit for any particular purpose, have been developed with reasonable care and skill or tested, for the presence of pathogens or otherwise, or are viable, safe, or non-toxic.

UCL shall have no liability to the Company, whether in contract, tort or otherwise, in relation to the supply of the Materials to the Company or their use or keeping by the Company Scientist and/or Company or by any other person, or the consequences of their use, to the maximum extent permitted under applicable law. The Company shall indemnify and hold harmless the Indemnified Parties from and against all Claims and Losses arising from such supply, use or keeping, including without limitation Claims and Losses arising from:

injury to the Company's employees and third parties;

infringement of third party intellectual property rights; and

use of the Materials within or outside the scope of this Agreement.

For the purposes of this Agreement:

"Indemnified Parties" shall mean UCL and its directors, officers, employees,

representatives and associated undertakings;

"Claims" shall mean all demands, claims, proceedings, penalties, fines and liability (whether criminal or civil, in contract, tort or otherwise); and

"Losses" shall mean all losses including without limitation financial losses, damages, legal costs and other expenses of any nature whatsoever.

The Company agrees to be bound by this Agreement in consideration of UCL making the Materials available to the Recipient.

English law shall apply to this Agreement, and the English courts shall have exclusive jurisdiction.

AGREED by the parties through their authorised signatories:-

For and on behalf of **University College London**	For and on behalf of **Ciphergen Biosystems, Inc.**
_____ Signed	_____ Signed
_____ Print Name	_____ Print Name
_____ Title	_____ Title
_____ Date	_____ Date

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

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 (Nos.333-109556 and 333-106434) and S-8 (Nos.333-122818, 333-117734, 333-113938, 333-105538, 333-89834, 333-61334, and 333-53530) of Ciphergen Biosystems, Inc. of our report dated March 17, 2006 relating to the consolidated financial statements and financial statement schedule, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 17, 2006

EXHIBIT 31.1

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

I, Gail S. Page, 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)) 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) 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

   (c) 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 17, 2006

/s/ GAIL S. PAGE
Gail S. Page
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)) 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) 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

   (c) 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 17, 2006

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

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, 2005 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 17, 2006

/s/ GAIL S. PAGE
Gail S. Page
President and Chief Executive Officer

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