P.E.
12-31-02

0-30365

ParadigmGenetics, Inc.™

Form 10-K

Dear Paradigm Genetics Stockholder,

During the past year Paradigm and its shareholders faced significant internal and external challenges, which were reflected in our disappointing share price performance. It became clear early in the year that, without relying on the public equity markets, fundamental changes were required to get the company back onto its previous course of success.

The core challenges we needed to overcome were the shrinking agricultural biotech markets and the lack of depth and validation of our emerging healthcare platform technologies. In addition, we needed to eliminate our cash burn.

Starting in July 2002, we put a new management team in place with the task of addressing the short-term financial situation and defining a long-term vision based on our new and developing core competencies, with an appropriate transition phase. While not out of the woods yet, we are very pleased to report solid progress in all key areas.

By diligently focusing on our key strategic targets and instilling company-wide discipline on productivity improvement and cash conservation, we reached breakeven for cash flow from operations for the first time in the fourth quarter of 2002. While this breakeven rate is not yet stabilized, it represents a significant step in achieving our goal of eliminating the need to rely on the equity markets to finance current plans. Further, we continue to pursue alternative means of financing to strengthen our balance sheet.

Our agricultural biotechnology business is now generating a healthy profit margin. And despite the massive industry consolidation, we see continuing opportunities in this market and remain committed to maintaining our leadership position there. In the near term, we're expanding our target market beyond crop protection target and crop trait discovery, to include toxicology and post-market product support, as large agricultural companies spend more research dollars further down the discovery-to-development pipeline. For the longer term, we are leveraging our deep understanding in plant biology and biological pathways to pursue our own proprietary projects in pathway engineering of plants to produce relevant chemical entities in a renewable, cost effective and environmentally responsible manner.

Our increased investment in our healthcare technologies has led to a compelling offering, which we are now rolling out to pharmaceutical and biotechnology companies. We are focusing our healthcare research efforts on the discovery and validation of proprietary biomarkers to validate drug targets, predict drug safety and diagnose disease. We believe our systems biology approach will provide important insights into drug safety and efficacy leading to improved R&D productivity for the pharmaceutical industry, initially through collaborations and ultimately for our own products.

The application of our technologies to human health has received initial validation through two competitive government contracts we received in 2002. First, in June, we were awarded a five-year, $11.7 million Advanced Technology Program (ATP) grant from the National Institute of Standards and Technology (NIST) to co-develop with a partner a suite of technologies, which is intended to increase the number and success rate of validated targets for product development by the pharmaceutical and other life sciences industries. And second, in September, we were awarded a five-year, $23.8 million contract with the National Institutes of Environmental Health Sciences to help determine how toxicants work and cause damage at the cellular level.

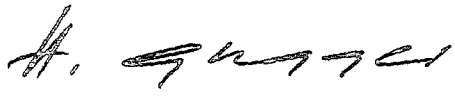
With our suite of proprietary technologies and complementary partnerships, we have created the potential for scientific collaborations that transcends the fee-for-service business model. To provide us with near-term revenues, we've built a microarray services component into Paradigm. This business will form the financial foundation to build a visible presence in healthcare and our first product concept based on sets of biomarkers for predictive toxicology for therapeutic drugs.

In 2002, we began a challenging process of building a strategic foundation for the future of Paradigm. While we have already seen significant results, our shareholders should look to further significant achievements in 2003. Our foundation-building activities have charged the Paradigm team with new life to pursue exciting avenues in 2003 and beyond.

We want to express our heartfelt thanks to our many loyal shareholders for their invaluable support and for giving us the time to reposition Paradigm for the future. We wish you all the best in the remainder of 2003 and look forward to sharing our future successes with you.

Sincerely,

G. Steven Burrill
Chairman of the Board



Heinrich Gugger, Ph.D.
President and CEO

March 27, 2003

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

FORM 10-K

(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, 2002.

OR

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

for the transition period from to

Commission File Number:
0-30365

Paradigm Genetics, Inc.
(Exact name of registrant as specified in its charter)

Delaware	56-2047837
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

108 Alexander Drive, Research Triangle Park, North Carolina 27709
(Address of principal executive offices and zip code)

Registrant's telephone number, including area code: (919) 425-3000

Former name, former address, and former year, if changed since last report: Not applicable

SECURITIES REGISTERED TO SECTION 12(b) OF THE ACT: NONE

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:
COMMON STOCK, PAR VALUE $.01 PER SHARE

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 (Section 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act).

Yes ☐ No ☒

The aggregate market value of the registrant's voting and non-voting common stock, held by non-affiliates of the registrant (without admitting that any person whose shares are not included in such calculations is an affiliate), computed by reference to the price at which the common stock was last sold as of the last business day of the registrant's most recently completed second fiscal quarter, was $26,310,479.

As of February 28, 2003, there were 32,041,655 shares of common stock, $.01 per share par value, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information contained in Part III of this Form 10-K is incorporated by reference from the registrant's proxy statement, to be filed with the Securities and Exchange Commission in connection with the solicitation of proxies for the registrant's Annual Meeting of Stockholders to be held on May 9, 2003.

PARADIGM GENETICS, INC.

FORM 10-K

FOR THE YEAR ENDED DECEMBER 31, 2002

Table of Contents

PART 1

ITEM 1. BUSINESS

Overview

We are a biotechnology company seeking to improve research and development productivity in the agricultural and healthcare industries. We focus our suite of technologies on the full product development cycle, from target discovery to the enhancement of safety and efficacy profiles of lead candidates.

We use a systems biology approach to understand gene function in the context of biological pathways and to develop assays and biomarkers for molecular diagnostic solutions for life sciences companies. By conducting our research with a Gene to Cell to System™ approach, we ensure that we have an accurate and complete understanding of biological systems. Hence, we, our partners and our customers can make the best decisions for future and existing life sciences products and therapies.

Specifically, we are focusing on five market opportunities: crop traits, crop protection, green biotechnology, predictive toxicology, and biomarker discovery. We are building our business by partnering with commercial, government and academic entities to help them achieve greater efficiencies in their research and development activities. Additionally, we are developing our own product concepts around biomarkers and green biotechnology.

Market Need

Agriculture

Agricultural companies continue to search for safer and more effective pesticides to control weeds (herbicides), fungal infections (fungicides) and insect predation (insecticides). Due to their widespread use and exposure to the wider environment, agricultural products are under continuous regulatory scrutiny. More stringent regulatory guidelines mean that future pesticides will need to be used at much lower rates, have precision to control only the targeted pest, and be increasingly safer to farmers, consumers and the environment.

Many of these same agricultural companies are also searching for the next generation of traits to be engineered into crops. Major target crops for these new traits are corn, wheat, soybean, rice, cotton, and canola, in addition to vegetables and other specialty crops. These new crop traits would improve the overall performance of plants by providing resistance to various diseases or environmental conditions (e.g., drought). In addition, a future generation of traits will improve consumer characteristics of foods such as nutritional content and taste. Agricultural companies are also interested in expanding the utility of products extracted from plants such as oils, fibers, fine chemicals and medicines.

As a result of recent consolidation, there are now six global agrochemical and seed companies: BASF, Bayer CropScience, Dow AgroSciences, DuPont-Pioneer, Monsanto, and Syngenta. Each company has distinct strategies for building product lines of new agrochemicals and new seed varieties. As growth in this industry can be difficult, these companies are always looking for innovative and cost effective research and development programs. We believe many of these companies will outsource certain research and development activities to biotechnology partners to achieve improved efficiency.

Healthcare

According to the Tufts Center for the Study of Drug Development, the cost of developing a new drug and bringing it to market, including failures, now exceeds $800 million in the United States, and the length of time from candidate discovery to approval has increased from an average of eight years in the 1960s to more than

14 years today. Toxic side-effects from drugs result in more than two million hospitalizations each year and there are more than 100,000 deaths annually from unintended drug complications, making this the fifth leading cause of death in the United States. Currently, on average, more than 10,000 lead compounds must be tested in pre-clinical development for each marketed drug that is developed in order to overcome attrition due to inadequate safety or efficacy.

Additionally, significant improvements in the process for FDA approval of new molecular entities (NMEs), preludes to new drugs, have not occurred. In 2002, only 15 NMEs were approved by the FDA as compared to 24 in 2001. There is a growing consensus that the drug development process can be most immediately enriched by technologies that provide (i) better validation of existing targets; (ii) early prediction of potential toxicology and efficacy issues; and (iii) stratification of patients in clinical trials. In addition, technologies that can correlate DNA microarray (gene expression) data with cell and system level functions will have immediate application in drug discovery (target identification) and clinical research.

Increasingly, pharmaceutical companies are turning to smaller biotechnology companies to gain access to new experimental medicines and technology.

Our Offering and Strategy

We believe we are uniquely positioned to address the agricultural market's need to discover new crop traits more efficiently and to develop safer and more effective crop protection chemicals. Using our *GeneFunction Factory*™ integrated technology platform, we believe we have discovered and validated genes for improving crop traits faster, more efficiently and with higher scientific rigor than any company today. We have also used our *GeneFunction Factory*™ platform to identify hundreds of new targets for herbicides. Additionally, we have developed significant expertise in target discovery and lead chemical programs in fungicides, the production of high throughput screening assays for herbicides and the modification and enhancement of fine chemical production from plants.

For the human healthcare industry, we believe our Gene to Cell to System™ approach will provide important and proprietary insights into drug safety and efficacy for our partners and ourselves and will increase R&D productivity in the pharmaceutical industry. We believe our proprietary human metabolomics platform, when coupled with gene expression and disease association data, will have the potential to lower the cost of drug discovery, decrease the time to market for new drugs, lower the incidence of toxic side effects and complement other genomics tools to help researchers better understand the link between cellular or biochemical function and pharmaceutical drugs and disease response.

To meet market needs and build shareholder value, we are focused on the following business objectives:

Maintain and grow our leadership position in agricultural biotechnology. Agriculture continues to be the largest sector of the U.S. economy. The worldwide, chronic shortage of food and the drive to improve human health through food continue to prompt the need for innovative products. We have built a history of proven performance with market leaders like The Monsanto Company and Bayer CropSciences and developed market recognition for our deep understanding of agricultural systems. We will seek to further partner with global agricultural leaders to provide new technology and cost-effective solutions to bring new products to market.

Develop proprietary production concepts in green biotechnology. Green biotechnology describes the use of genetically modified crops for the production of specialty chemicals, such as menthol, and pharmaceutical intermediates. We believe our proprietary technologies are uniquely positioned to capture this emerging market opportunity. Using our agricultural platforms to develop production systems for green biotechnology is one of our long-term market strategies.

Build a healthcare presence through integrative predictive toxicology. The failure of drug candidates due to unanticipated or poorly characterized safety concerns is a major reason that pharmaceutical companies are

unable to maintain a rich pipeline of new products. Predictions of toxicity are now becoming possible because of the availability of techniques to rapidly characterize early responses of cells and tissues to toxic molecules. Paradigm has already built credibility in this new field of toxicogenomics through its contract with National Institute of Environment Health Sciences (NIEHS), and plans to further differentiate its offering to the pharmaceutical industry by using an integrated systems biology approach to discover more efficient and accurate ways to predict toxic reactions earlier in the drug development process.

Expand our healthcare presence through biomarker discovery and disease staging. Many industry analysts foresee a future for human health in which highly targeted medicines are used to treat specific disease subtypes or stages. These new medicines will treat root causes of disease rather than just alleviate symptoms. Particular biological entities that can be used as biomarkers to define types or stages of a particular disease will be needed with these new medicines. Biomarkers will constitute combinations of metabolites, proteins or gene expression patterns. We will use our Gene to Cell to System™ focus to discover proprietary biomarkers that can be used from discovery through to the clinic to develop the next generation of targeted medicines.

Develop a Microarray Service business. Gene expression profiling is a widely used genomics technology. But many agricultural, pharmaceutical and other biotechnology companies do not want to pre-invest in the technology or develop the expertise in-house. In September 2002, we were awarded a five-year contract from the NIEHS for $23.8 million to provide microarray services for the National Toxicology Program. We plan to build on this success as well as our years of experience with gene expression profiling and our informatics strengths, along with our ongoing relationship with Agilent Technologies, to develop near-term revenues through a microarray service business.

Our Technology Foundation

Since our founding in 1997, we have built significant technology platforms for our agricultural endeavors. We are now leveraging this investment into our human health research. We believe that our proprietary integrated technology platforms, coupled with our data coherence tools, are singularly unique and applicable across the life sciences.

For agriculture, we apply our *GeneFunction Factory*™ integrated technology platform to the rapid analysis of the function of thousands of plant genes, to enable us and our commercial partners to accelerate the development of novel products. For human health, we will apply our gene expression profiling and metabolomics technologies to improve the study of drug targets, lead compounds and predictive medicines, thereby accelerating drug discovery and development for our partners and ourselves.

Our technology foundation includes:

Gene Expression Profiling

Gene expression profiling provides a snapshot of the genes expressed in an organism at a given time. By comparing gene expression profiles of a variant organism to a normal organism, we gather information about the function of the modified gene as well as the effect of that gene on the expression of other normal genes. By determining how a modified gene affects normal genes, we gain insight into biochemical pathways of an organism.

Biochemical Profiling (or Metabolomics)

We use our metabolomics platform to provide a snapshot of the chemicals, including vitamins, minerals and other biochemicals, in cells, tissues, and organisms, at a given time. By understanding what changes take place in biochemicals, we gain valuable information about the function of genes and proteins in disease and drug response. Our metabolomics platform uses mass spectroscopy, which separates molecules by electrical charge and size, and chromatography, which separates molecules by size and chemical properties.

Phenotype Profiling

Phenotype profiling is the measurement of physical and chemical characteristics of an organism at one or more times during its life cycle. For our agricultural research, we measure approximately 140 different characteristics of our model system *Arabidopsis*, under standard conditions as well as under various stress conditions. These different measurements, when taken at specified times, produce a phenotype profile for a variant that we can compare to a phenotype profile of a normal organism to help understand the function of the modified gene.

Data Integration/Coherence

Despite the wealth of genomics and other "omic" data now available (e.g. proteomic and metabolomic), life science researchers are challenged to translate that information into clear measures of safety and efficacy of lead compounds. We believe the key lies in integrating these various data streams in such a way that scientists can simultaneously see all the data, identify relationships between them and draw meaningful conclusions. We believe we are one of the first companies developing such data integration and data coherence tools. Additionally, we have developed an extensive informatics system to intelligently store, retrieve, analyze and mine the data we collect.

Our Commercial Partnerships

Bayer CropScience (Bayer)

In September 1998, we entered into a commercial partnership with Bayer for the development of new chemical herbicides. Under the terms of the commercial partnership, we use our *GeneFunction Factory*™ platform to identify *Arabidopsis* genes that may be targets for herbicide discovery. We are providing exclusively to Bayer assays (or tests) based on these targets for use in high throughput screening for herbicides. The commercial partnership had an initial term of three years, ending in September 2001. In June 2001, Bayer extended the term of this agreement for an additional three years, ending in September 2004. Bayer also has the option to extend the agreement for two additional years, through September 2006. The commercial partnership entitles us to committed research funds, additional fees based on the number of assays we deliver, and milestone and royalty payments for any herbicides that might result from the partnership. Under the terms of the deal, Bayer will pay us a total of approximately $24.3 million in committed funding and as much as an additional $21.4 million in performance fees and milestone payments. We have achieved all of our milestones in our commercial partnership with Bayer, including the delivery of several assays for high throughput chemical screening.

The Monsanto Company (Monsanto)

In November 1999, we entered into a commercial partnership with Monsanto to provide certain *Arabidopsis*-based gene function data for the development of crop inputs and outputs and nutrition. Under the terms of this commercial partnership, Monsanto is providing us with thousands of genes from *Arabidopsis* and other organisms. We are performing a functional analysis of such genes for Monsanto using our *GeneFunction Factory*™ platform. Monsanto will either own or have exclusive licenses to certain patents that result from this project. The commercial partnership has an initial term of six years from the commencement of work in February 2000 and ending in January 2006, unless Monsanto terminates it at an earlier date because we do not achieve specific milestones. The commercial partnership entitles us to committed research funds, additional fees based on the number of genes analyzed and royalty payments for any productized crop traits that might emerge from the partnership. Under the terms of the deal, Monsanto will pay us approximately $41.5 million in committed funding and as much as an additional $13.5 million in performance fees and milestone payments.

National Institute of Environmental Health Sciences

In September 2002, Paradigm Genetics was awarded a five-year contract from the NIEHS for $23.8 million to provide microarray processing services and to participate in toxicology research with NIEHS and five

university-based labs (Cooperative Research Members, or CRMs). Collectively, this is referred to as the Toxicogenomics Research Consortium (TRC). As of December 31, 2002, we have received $63,000 under this contract. This amount is less than we anticipated receiving by this date, and is due to the delay in approval of the 2003 United Sates Federal budget.

Advanced Technology Program

In June 2002, we were awarded a five-year, $11.7M grant from National Institute of Standards and Technology (NIST) to develop innovative tools for target discovery through the analysis of complex coherent data sets. This grant, which was the largest bioinformatics grant ever awarded in NIST's Advanced Technologies Program and the largest grant awarded by NIST in 2002, involves a collaborative research agreement with LION Bioscience to develop robust software tools, called the Target Assessment Technologies Suite (TATS), to improve data integration, transform data from different sources into a single coherent data set, and then to analyze these data to identify gene function or mechanism of action rapidly, reliably, and efficiently. Paradigm and LION Bioscience will participate equally in the grant. As of December 31, 2002, Paradigm had received $210,000 under this grant.

VDDI Pharmaceuticals (VDDI)

Our commercial partnership with VDDI was signed in February 2002, for the development of antibiotics for the treatment of gram-positive bacterial infections. Pursuant to the agreement, we used our proprietary metabolomics technology platform to prioritize lead compounds targeting the essential bacterial enzyme nicotinamide adenine dinucleotide synthetase for further preclinical development. This commercial partnership, for which we will receive $1 million, ended in December 2002.

Competition

We face intense competition in the different market segments we are pursuing. Our potential competitors include specialized biotechnology companies, internal research & development efforts of agricultural and pharmaceutical companies, diagnostic companies, academic and research institutions and government agencies. Many of our competitors have significantly larger financial, technical and personnel resources than we do, which may allow them to have a competitive advantage.

A number of our competitors are developing technologies and products to improve research & development productivity. If these competitors partner or commercialize their technologies or products before we do, they could render our technologies and products obsolete or noncompetitive. In addition, many of our competitors have significantly greater experience than we do in their respective fields. We expect that competition will increase as technical advances are made in genomics, metabolomics and data integration/coherence are made and become more widely known.

In the areas of crop trait, crop protection discovery and green biotechnology, our competitors include Exelixis, Inc., Ceres, Inc., Mendel Biotechnology, Inc., Large Scale Biology Corporation and Diversa Corporation, among others. In predictive toxicology, our competitors include CuraGen, Inc. and GeneLogic, Inc., among others. In biomarker discovery, our competitors include SurroMed, Inc. and Beyond Genomics, Inc., among others.

Government Regulation

Regulation of Development and Commercialization of Agricultural Products

Federal, state, local and foreign government regulations and regulatory agencies will govern our efforts, alone or together with our commercial partners, to develop and commercialize genetically enhanced crop

products. These regulations and agencies may prevent us and our commercial partners from developing and marketing crop product candidates in a timely manner or under technically or commercially feasible conditions, and may impose expenses, delays and other impediments to our efforts to develop such product candidates.

The USDA prohibits genetically modified plants from being grown and transported except pursuant to an exemption or under special controls. In general, companies apply for an exemption to facilitate product development because the special controls are burdensome. However, we can not guarantee that the products we develop will qualify for such an exemption.

Regulatory policies for genetically modified crop products vary widely, are currently the subject of intense political controversy, and may change substantially in the near future. Accordingly, labeling, premarket notification or other restrictions in foreign countries where we and our commercial partners may want to develop and/or market genetically modified product candidates may impose additional expenses and delays on such product candidates or may make commercialization in such countries impracticable.

Our future crop product candidates and development/commercialization procedures or facilities may also be subject to other regulations and regulatory agencies, such as the Occupational Safety and Health Act, the Toxic Substances Control Act, the National Environmental Policy Act, other federal water, air and environmental quality statutes, import/export control legislation and other laws. Any product candidates relating to pesticides will also be subject to the jurisdiction of the Environmental Production Agency.

Regulation of Drug Development and Commercialization

Any new drug developed by our commercial partners, as a result of their use of our technology platforms, must undergo an extensive regulatory review process in the United States and other countries. The testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that our commercial partners will receive approvals for any new drug on a timely basis, if at all.

Any products manufactured or distributed pursuant to FDA approvals are subject to continuing regulation by the FDA, including advertising, record-keeping and reporting requirements, compliance with FDA's current good manufacturing practices, and periodic unannounced inspections.

No agency has approved any product resulting from the use of our technology platforms for commercialization in the United States or elsewhere. In addition, our commercial partners have not submitted any investigational new drug applications for any such product candidate. We cannot be certain if or when our commercial partners will submit an application for regulatory review, or whether our commercial partners will be able to obtain marketing approval for any products on a timely basis, if at all. If our commercial partners fail to obtain required governmental approvals, it will prevent them from marketing drugs or diagnostic products. The occurrence of any of these events may cause our business, financial condition and results of operations to suffer.

Environmental Regulation

Our research and development activities involve the controlled use of hazardous materials and chemicals. We are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of such materials and certain waste products. The risk of accidental contamination or injury from these materials cannot be eliminated. In the event of an accident, we could be held liable for any damages that result, and any liability could exceed our resources.

Intellectual Property

We seek U.S. and foreign patent protection for major components of our technology platforms. We also rely on trade secret protection for certain of our confidential and proprietary information, and we use license

agreements both to access external technologies and assets and to convey certain intellectual property rights to others. Our commercial success will be dependent in part on our ability to obtain commercially valuable patent claims and to protect our intellectual property portfolio. As of February 28, 2003, we had 82 U.S. patent applications pending and 37 international patent applications pending, which are subject to rights that we have granted to various collaborators and development partners. We have 13 trademark applications pending in the United States. We have seven registered trademarks. We own nine issued U.S. patents and no issued patents in any other country.

We have applied, and intend to make additional applications, for patent protection for:

- key elements, processes and supporting technologies in our biochemical profiling platform;
- methods relating to gene sequencing, phenotype analysis, gene expression profiling, metabolic profiling and other methods for determination of gene function;
- bioinformatic technologies;
- function specific patterns of gene expression we identify; and
- individual genes and targets we discover.

In addition, patent law relating to the scope of claims in the technology field in which we operate is still evolving. The extent of future patent protection is uncertain. In particular, we are aware of several groups that are attempting to identify and patent gene fragments and full-length genes, both characterized and uncharacterized. There is substantial uncertainty regarding the possible patent protection for gene fragments or genes without known function or correlation with specific functions. Furthermore, others may independently develop similar or alternative technologies, duplicate any of our technologies, and if patents are licensed or issued to us, design around the patented technologies licensed to or developed by us. In addition, we could incur substantial costs in litigation if we are required to defend ourselves in patent suits brought by third parties or if we initiate such suits.

We are aware of a number of U.S. patents and patent applications and related foreign patents and patent applications owned by third parties relating to gene sequences and the analysis of gene function. These other technologies may provide third parties with competitive advantages over us and may hurt our business. In addition, some third party patent applications contain broad claims, and it is not possible to determine whether or not applicants will narrow such claims during prosecution or whether patent offices will allow and issue patents on such claims, even if such claims appear to cover prior art or have other defects. An owner or licensee of a patent in the field may threaten or file an infringement action and we may or may not prevail in any such action. The cost of defending an infringement action may be substantial, which could significantly increase our expenses and increase our losses. Furthermore, other patent holders may not grant us required licenses on commercially viable terms, if at all. Failure to obtain any required license could prevent us from utilizing or commercializing one or more of our technologies or gene-related products.

Such patents may include claims relating to novel genes and gene fragments and to novel uses for known genes or gene fragments identified through our discovery programs. We may not be able to obtain meaningful patent protection for our discoveries; even if patents are issued, the scope of the coverage or protection they would afford is uncertain. Failure to secure such meaningful patent protection would endanger our competitive position.

Employees

As of February 28, 2003, we had 194 full-time employees, of whom 26 hold Ph.D. degrees. Of our total workforce, 160 are engaged in research and development activities, and 34 are engaged in business development, finance and administration. None of our employees is represented by a collective bargaining agreement. We believe that our relations with our employees are good.

RISK FACTORS

Our common stock may be delisted from Nasdaq.

On October 25, 2002, we received a notice from the Nasdaq National Market that our common stock had failed to maintain the required minimum closing bid price of $1.00 for a period of 30 consecutive trading days. As a result, Nasdaq provided us 90 calendar days, or until January 23, 2003, to regain compliance with this requirement or be subject to delisting from the Nasdaq National Market. In order to regain compliance, the closing bid price of our common stock needed to remain above $1.00 for 10 consecutive trading days. We were unable to regain compliance with this requirement during this time period. On March 6, 2003 we appeared before a Nasdaq listing qualifications board in order to appeal to Nasdaq for relief from this requirement. Nasdaq has not yet ruled on our appeal. If our appeal is unsuccessful, our common stock will be delisted from trading by the Nasdaq National Market, in which case we plan to apply for listing on the Nasdaq SmallCap Market. While we currently meet the criteria that would enable us to transfer to the Nasdaq SmallCap Market, there is no assurance we will be accepted or that we will continue to meet the criteria at the time we apply for SmallCap inclusion. If we could not transfer to the Nasdaq SmallCap Market and were forced to be listed on the NASD's OTC Bulletin Board, trading in our common stock would likely decrease substantially, or cease altogether, the market price of our common stock may decline further, potentially to zero, and stockholders may lose some or all of their investment. Securities analysts' and news media's coverage, if any, of us will be reduced. Furthermore, delisting of our common stock from the Nasdaq National Market and subsequent delisting from the Nasdaq SmallCap Market or failure to meet the requirements for transferring to the SmallCap Market could inhibit, if not preclude, our ability to raise additional working capital on acceptable terms, if at all, or to utilize our stock as full or partial consideration for the acquisition of any lines of business from third parties.

We are an early stage company using unproven technologies and, as a result, we may never achieve, or be able to maintain, profitability.

You should evaluate us in light of the uncertainties affecting an early stage biotechnology company. Our *GeneFunction Factory*™, our *FunctionFindersystem*™, our metabolic profiling platform, and our databases are still evolving. We have not yet proven that determining the function of a gene in commercially significant target organisms or elucidating the biochemical profiles of cells, tissues, or fluids will enable us to develop commercial products. Furthermore, while we are continuing with our work in the agriculture sector, we are increasing our efforts to address the human health market with our metabolic profiling platform. To date, we have no significant commercial partnerships in this area.

We have a history of net losses. We will continue to incur net losses that may depress our stock price.

We have incurred net losses in each year since our inception and expect these losses to continue. We experienced a net loss of approximately $23.5 million for the twelve months ended December 31, 2002. As of December 31, 2002, we had an accumulated deficit of approximately $72.4 million. To date, we have derived all of our revenues from a government contract, two commercial partnerships and government grants. We expect to derive revenue in the foreseeable future principally from government contracts and commercial partnerships. However, we expect our revenues from our commercial partnership with Bayer will decrease in 2003. We expect to spend a significant amount of capital to fund research and development and enhance our core technologies, particularly our metabolic profiling platform. As a result, we expect that our operating expenses will increase significantly in the near term and, consequently, we will need to generate significant additional revenues to become profitable. We cannot accurately predict when, if ever, we will become profitable.

We may never become profitable if we and our commercial partners are unable to develop or commercialize our technologies into products.

We have no experience in manufacturing and marketing products, and we currently do not have the resources or capability to manufacture products on a commercial scale. In order for us to commercialize our products on our own, we would need to develop, or obtain through outsourcing arrangements or through

acquisitions, the capability to manufacture, market and sell products. Since we do not currently possess the resources necessary to develop and commercialize potential products ourselves, we must enter into commercial partnerships to develop and commercialize products.

We have entered into only two commercial partnerships, with Bayer and Monsanto, to fund the development of certain new products, including herbicides and plants with improved nutritional and growth characteristics. We have entered into no significant commercial partnerships in the area of human health. If we are unable to successfully achieve milestones or our commercial partners fail to develop successful products, we will not earn certain revenues contemplated under such partnerships. In addition, we may not be able to enter into additional commercial partnerships. We do not control the resources that our commercial partners devote to our projects and our commercial partners may not perform their obligations. Our commercial partnerships are subject to termination rights by the commercial partners. If any of our commercial partners were to terminate its relationship with us, or fail to meet its contractual obligations, it could have a material adverse effect on our revenues and our ability to undertake research, to fund related and other programs and to develop, manufacture and market any products that may have resulted from the commercial partnership. Also, we may pursue opportunities in fields that conflict with our commercial partners or in which our commercial partners could become active competitors. In either case, we may not be able to commercialize our products.

If we lose our key personnel or are unable to attract and retain additional personnel, our operations could be disrupted and our revenues could decrease.

Our success depends on the continued services and on the performance of our senior management and scientific staff. The loss of the services of any of our senior management or scientific staff could seriously impair our ability to operate and achieve our objectives, which could reduce our revenues. Recruiting and retaining qualified scientific personnel to perform future research and development work will be critical to our success.

In order to achieve our business objectives, we must identify, attract, train and motivate additional personnel with expertise in specific industries and areas applicable to the products developed through our technologies. We compete intensely for these personnel and we may be unable to achieve our personnel goals. Our failure to achieve any of these goals could seriously limit our ability to improve our operations and financial results.

If we were successfully sued for product liability, we could face substantial liabilities that exceed our resources.

We may be held liable if any product we develop, or any product which is made using our technologies, causes injury or is found unsuitable during product testing, manufacturing, marketing, sale or use. For example, a genetically modified food could, after it is sold, be found to cause illness in individuals who eat the food. Also, like other pharmaceutical products, those produced through genetically modified plants could be found to cause illness. These risks are inherent in the development of chemical, agricultural and pharmaceutical products. We currently do not have product liability insurance. If we choose to obtain product liability insurance but cannot obtain sufficient insurance coverage at an acceptable cost or otherwise protect against potential product liability claims, the commercialization of products that we or our commercial partners develop may be prevented or inhibited. If we are sued for any injury caused by our products, our liability could exceed our total assets.

If we do not compete effectively, our losses could increase.

Our technology platform for the industrialization of gene function determination faces competition from functional genomics technologies, which are computer hardware and software technologies that researchers use to help them identify the role that specific genes play within organisms, created by others, including Exelixis, Inc., Ceres, Inc., Mendel Biotechnology Inc., and Large Scale Biology Corporation. Our metabolic profiling platform also faces competition from other companies attempting to analyze biochemicals in human beings. We expect competition to intensify in functional genomics and metabolomics research. Genomic technologies have undergone and are expected to continue to undergo rapid and significant change. Our future success will depend

in large part on maintaining a competitive position in these fields. Metabolomics is a rapidly growing new technology. We or others may make rapid technological developments, which may result in products or technologies becoming obsolete before we recover the expenses we incur in connection with our development. We or our commercial partners may offer products which could be made obsolete by less expensive or more effective technologies. We may not be able to enhance our technology in ways necessary to compete successfully with newly emerging technologies.

Any products that we may develop alone or in collaboration with others will compete in highly competitive markets. In the specific markets in which we apply or intend to apply our technology platform, we face competition from pharmaceutical, plant genomics, and agri-chemical companies. Many of our existing and potential competitors have substantially greater financial resources, research and development staffs, facilities, manufacturing and marketing experience, distribution channels and human resources than we do. Many of these competitors have achieved substantial market penetration in the human health, agriculture and nutrition markets.

If we are not able to adequately acquire and protect patents and licenses, we may not be able to operate our business and remain competitive.

Our business and competitive position will depend in part on our ability to obtain patents and maintain adequate protection of our other intellectual property for our technologies and products in the United States and other countries. As of February 28, 2003, we had 82 U.S. patent applications pending and 37 international patent applications pending, which are subject to rights that we have granted to various collaborators and development partners. We own 9 issued U.S. patents and no issued patents in any other country. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting their proprietary rights in these foreign countries.

The patent positions of life science companies are generally uncertain and involve complex legal and factual questions. Our business could be hurt by any of the following:

- our pending patent applications may not result in issued patents;
- the claims of any issued patents may not provide meaningful protection;
- we may be unsuccessful in developing additional proprietary technologies that are patentable;
- our patents may not provide a basis for commercially viable products or provide us with any competitive advantages and may be challenged by third parties; and
- others may have patents that relate to our technology or business.

Third parties have filed, and in the future are likely to file, patent applications covering genes and gene function that we have developed or may develop or technology upon which our technology platform depends. If patent offices issue patents on these patent applications and we wish to use the claimed genes, gene functions or technology, we would need to obtain licenses from third parties. However, we might not be able to obtain any such license on commercially favorable terms, if at all, and if we do not obtain these licenses, we might be prevented from using certain technologies or taking certain products to market.

The patent positions of biopharmaceutical and biotechnology companies, including our patent position, are generally uncertain and involve complex legal and factual questions. Patent law relating to the scope of claims in the field in which we operate is still evolving. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents or are effectively maintained as trade secrets. We will apply for patents covering both our technologies and products, as we deem appropriate. However, other companies may challenge these applications and governments may not issue patents we request. Any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products. Furthermore, others

may independently develop similar or alternative technologies or design around our patented technologies. In addition, our patents may be challenged, invalidated or fail to provide us with any competitive advantages.

We rely upon trade secret protection for our confidential and proprietary information. We have taken security measures to protect our proprietary information. These measures may not provide adequate protection for our trade secrets or other proprietary information. Even though we seek to protect our proprietary information by entering into confidentiality agreements with employees, commercial partners and consultants, people may still disclose our proprietary information, and we might not be able to meaningfully protect our trade secrets.

If third parties make or file claims of intellectual property infringement against us or otherwise seek to establish their intellectual property rights, we may have to spend time and money in response and cease some of our operations.

Third parties may claim that we are employing their proprietary technology without authorization or that we are infringing their patents. We could incur substantial costs and diversion of management and technical personnel in defending ourselves against any of these claims. Furthermore, parties making claims against us may be able to obtain injunctive or other equitable relief which could effectively block our ability to further develop, commercialize and sell products. In the event of a successful claim of infringement, courts may order us to pay damages and obtain one or more licenses from third parties. We may not be able to obtain these licenses at a reasonable cost, if at all. Defense of any lawsuit or failure to obtain any of these licenses could prevent us from commercializing available products.

If adverse public reaction limits the acceptance of genetically modified products, demand for any products that we or our collaborators may develop in agriculture and nutrition may decrease.

The commercial success of our product candidates in agriculture and nutrition will depend in part on public acceptance of the use of genetically modified products, including drugs, food, plants and plant products. Claims that genetically modified products are unsafe for consumption or pose a danger to the environment may influence public attitudes. Any genetically modified product that our collaborators or we may develop may not gain public acceptance. Due to public reaction in both the United States and Europe, some food processors and restaurants have already decided not to sell food that has been genetically altered or that contains genetically altered ingredients. If this policy continues or becomes more common, there could be a decrease in demand for products that we or our commercial partners may develop.

Any product that we or our commercial partners develop using the gene function information we provide may be subject to a lengthy and uncertain government regulatory process that may not result in the necessary approvals, may delay the commercialization of these products or may be costly, any of which could reduce our revenues.

Any new product that we or our commercial partners develop will likely undergo an extensive regulatory review process in the United States by the FDA and the USDA and by regulators in other countries before it can be marketed or sold. For example, the FDA must approve any drug or biologic product before it can be marketed in the U.S. This review process can take many years and require substantial expense. In the future, we and our commercial partners may also be required to submit pre-market information to the FDA about food developed through biotechnology. Adverse publicity could lead to greater regulation and trade restrictions on imports and exports of genetically modified products. Changes in the policies of U.S. and foreign regulatory bodies could increase the time required to obtain regulatory approval for each new product.

Our efforts to date have been primarily limited to identifying targets. If regulators approve any products that we or our commercial partners develop, the approval may impose limitations on the uses for which a product may be marketed. Regulators may require the submission of post-market launch information about a product

after approving it, and may impose restrictions, including banning the continued sale of the product, if they discover problems with the product or its manufacturer.

Our stock price is extremely volatile.

The stock market has experienced significant price and volume fluctuations, and the market prices of technology companies, particularly life science companies, have been highly volatile. Our common stock began public trading in May 2000. The trading price of our common stock has been extremely volatile, and we believe it will remain highly volatile and may fluctuate substantially.

If our results of operations fluctuate and quarterly results are lower than the expectations of securities analysts, then the price of our common stock could fall.

Our operating results historically have fluctuated on a quarterly basis and are likely to continue to do so in the future. These fluctuations could cause our stock price to fluctuate significantly or decline. Some of the factors, which could cause our operating results to fluctuate, include:

- the approval of the United States federal budget related to the funding of our contract with NIEHS;
- expiration of research contracts with commercial partners, which may not be renewed or replaced;
- the success rate of our discovery efforts leading to milestones and royalties;
- the timing and willingness of commercial partners to commercialize our products which would result in royalties; and
- general and industry specific economic conditions, which may affect our commercial partners' research and development expenditures.

A large portion of our expenses, including expenses for facilities, equipment and personnel are relatively fixed. Accordingly, if revenues decline or do not grow as anticipated due to expiration of commercial partnerships or government contract or research grants, failure to obtain new contracts or other factors, we may not be able to correspondingly reduce our operating expenses. Failure to achieve anticipated levels of revenues could therefore significantly harm our operating results for a particular fiscal period.

Our operating results in some quarters may not meet the expectations of stock market analysts and investors. In that case, our stock price would likely decline.

If our stockholders sell substantial amounts of our common stock, the market price of our common stock may fall.

The market price of our common stock could decline as a result of sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur. In addition, these factors could make it more difficult for us to raise funds through future offerings of common stock. As of December 31, 2002, there were 32,039,593 shares of common stock outstanding. All of the (i) 11,847,727 shares sold in our initial public offering and our October 2001 direct offering, (ii) 422,459 shares issued to Celera and subsequently registered on Form S-3, (iii) outstanding shares issued pursuant to stock option exercises or purchases under our Employee Stock Purchase Plan that were registered on one of our registration statements on Form S-8, and (iv) shares that have been sold pursuant to Rule 144 or Rule 701 are freely transferable without restriction or further registration under the Securities Act, except for shares purchased by our "affiliates," as defined in Rule 144 of the Securities Act. The remaining shares of common stock outstanding are "restricted securities" as defined in Rule 144. Holders of these shares may sell them in the future without registration under the Securities Act to the extent permitted by Rule 144 or other exemptions under the Securities Act.

Anti-takeover provisions of Delaware law and our charter could make a third-party acquisition of us difficult.

The anti-takeover provisions of Delaware law could make it more difficult for a third party to acquire control of us, even if the change in control would be beneficial to stockholders. We will be subject to the provisions of Section 203 of the General Corporation Law of Delaware. Section 203 will prohibit us from engaging in certain business combinations, unless the business combination is approved in a prescribed manner. Accordingly, Section 203 may discourage, delay or prevent someone from acquiring or merging with us. In addition, our restated certificate of incorporation and amended and restated by-laws contain certain provisions that may make a third party acquisition of us difficult, including:

- a classified board of directors, with three classes of directors each serving a staggered three-year term;
- the ability of the board of directors to issue preferred stock; and
- the inability of our stockholders to call a special meeting or act by written consent.

Some of our existing stockholders can exert control over us and may not make decisions that are in the best interests of all stockholders.

Due to their combined stock holdings, our officers, directors and stockholders who beneficially own more than five percent of our common stock, if they act together, will be able to exert a significant degree of influence over our management and affairs and over matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. In addition, this concentration of ownership may delay or prevent a change in control of us and might affect the market price of our common stock, even when a change may be in the best interests of all stockholders. In addition, the interests of this concentration of ownership may not always coincide with our interests or the interests of other stockholders and accordingly, they could cause us to enter into transactions or agreements, which we would not otherwise consider.

Future issuances of preferred stock may dilute the rights of our common stockholders.

Our board of directors has the authority to issue up to 5,000,000 shares of preferred stock and to determine the price, rights, privileges and other terms of these shares. The board of directors may exercise this authority without the approval of the stockholders. The rights of the holders of any preferred stock that we may issue in the future may adversely affect the rights of holders of our common stock.

ITEM 2. PROPERTIES.

We currently lease an aggregate of approximately 106,600 square feet of single-story and multi-story office and laboratory facilities in Research Triangle Park and Durham, North Carolina. The first building lease, for approximately 20,000 square feet on S. Miami Boulevard in Durham, North Carolina expires August 31, 2005. The second building lease, for approximately 86,000 square feet on Alexander Drive in Research Triangle Park expires on November 18, 2010. We have the option to renew all leases. We also have an option to require a real estate investment trust to develop and finance an additional two-story laboratory and office facility covering approximately 50,000 square feet on our current site on Alexander Drive in Research Triangle Park, North Carolina.

ITEM 3. LEGAL PROCEEDINGS.

We are not a party to any material legal proceedings.

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

No matters were submitted during the fourth quarter of the year ended December 31, 2002.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

Market Information

The Company's common stock, par value $.01 ("common stock") per share, is traded on the Nasdaq National Market ("Nasdaq") under the symbol "PDGM." The following table sets forth for the periods indicated the range of high and low sales prices for the common stock as reported by Nasdaq.

	High	Low
2002		
First Quarter	$ 5.710	$1.400
Second Quarter	$ 1.930	$1.010
Third Quarter	$ 1.650	$0.410
Fourth Quarter	$ 1.000	$0.290
2001		
First Quarter	$12.375	$3.516
Second Quarter	$ 9.100	$4.125
Third Quarter	$ 8.050	$3.620
Fourth Quarter	$ 7.090	$4.440

Stockholders

As of February 28, 2003, there were approximately 233 holders of record of the Company's common stock and, according to the Company's estimates, approximately 4,400 beneficial owners of the Company's common stock.

Dividends

The Company has never declared or paid dividends on its capital stock and does not anticipate paying any dividends in the foreseeable future.

ITEM 6. SELECTED FINANCIAL DATA

The statement of operations data for December 31, 2002, 2001 and 2000, and the balance sheet data as of December 31, 2002 and 2001 have been derived from our audited financial statements beginning on page F-1 of this report. The statement of operations data for the year ended December 31, 1999 and 1998 and the balance sheet data as of December 31, 2000, 1999 and 1998 have been derived from audited financial statements that are not included in this report. The historical results are not necessarily indicative of the operating results to be expected in the future. The selected financial data shown below should be read in conjunction with our financial statements and the notes to those financial statements beginning on page F-1 and "Management's Discussion and Analysis of Financial Condition and Results of Operations" beginning on page 19 of this report.

	Years Ended December 31,				
	2002	2001	2000	1999	1998
	(in thousands, except per share amounts and shares outstanding)				
Statement of Operations Data:					
Revenues:					
Commercial partnerships and government contract	$ 16,823	$ 24,337	$ 9,837	$ 2,052	$ 820
Grant revenue	360	130	500	145	51
Total revenues	17,183	24,467	10,337	2,197	871
Operating expenses:					
Research and development (includes $346, $561, $449, $88 and $0, respectively, of stock-based compensation)	26,386	28,013	19,186	7,615	3,641
Selling, general and administrative (includes $317, $510, $959, $112 and $6, respectively, of stock-based compensation)	10,909	12,398	10,131	4,826	1,530
Total operating expenses	37,295	40,411	29,317	12,441	5,171
Loss from operations	(20,112)	(15,944)	(18,980)	(10,244)	(4,300)
Interest income (expense), net	(185)	(39)	1,256	(376)	10
Loss from continuing operations	(20,297)	(15,983)	(17,724)	(10,620)	(4,290)
Loss from discontinued operations	(3,173)	(65)	—	—	—
Net Loss	(23,470)	(16,048)	(17,724)	(10,620)	(4,290)
Beneficial conversion of Series C Preferred Stock	—	—	(12,000)	—	—
Net loss attributable to common stockholders	$ (23,470)	$ (16,048)	$ (29,724)	$ (10,620)	$ (4,290)
Net loss per common share—basic and diluted:					
Loss per share from continuing operations	$ (0.63)	$ (0.59)	$ (1.61)	$ (2.51)	$ (1.14)
Loss per share from discontinued operation	(0.10)	—	—	—	—
Net loss per common share	$ (0.73)	$ (0.59)	$ (1.61)	$ (2.51)	$ (1.14)
Weighted average common shares outstanding—basic and diluted	31,973,527	27,264,022	18,434,804	4,236,409	3,750,036

	December 31,				
	2002	2001	2000	1999	1998
	(in thousands)				
Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$ 10,909	$ 10,736	$ 36,000	$ 3,956	$ 3,455
Working capital (deficiency)	(1,148)	(4,932)	16,003	(3,635)	1,148
Total assets	52,622	85,087	75,465	14,225	7,435
Long-term debt and capital lease obligation, net of current portion	3,378	7,678	10,753	8,047	3,539
Preferred stock	—	—	—	11,919	5,951
Accumulated deficit	(72,405)	(48,934)	(32,887)	(15,163)	(4,543)
Total stockholders' equity (deficit)	30,687	53,244	39,614	(2,827)	1,452

2002
Selected Quarterly Financial Data
(unaudited)

	2002				
	First	Second	Third	Fourth	Total
	(in thousands, except per share amounts)				
Revenues	$ 5,643	$ 4,414	$ 5,210	$ 1,916	$ 17,183
Loss from operations	(4,935)	(5,181)	(3,388)	(6,608)	(20,112)
Loss from continuing operations	(4,991)	(5,262)	(3,466)	(6,577)	(20,297)
(Loss) income from discontinued operations	(227)	254	(467)	(2,735)	(3,174)
Net loss attributable to common stockholders	(5,217)	(5,008)	(3,933)	(9,312)	(23,470)
Net loss per share attributable to common stockholders—basic and diluted	$ (0.16)	$ (0.16)	$ (0.12)	$ (0.29)	$ (0.73)

	2001				
	First	Second	Third	Fourth	Total
	(in thousands, except per share amounts)				
Revenues	$ 5,451	$ 6,058	$ 6,251	$ 6,707	$ 24,467
Loss from operations	(4,164)	(4,304)	(3,926)	(3,550)	(15,944)
Loss from continuing operations	(4,010)	(4,298)	(4,057)	(3,618)	(15,983)
(Loss) income from discontinued operations				(65)	(65)
Net loss attributable to common stockholders	(4,010)	(4,298)	(4,057)	(3,683)	(16,048)
Net loss per share attributable to common stockholders—basic and diluted	$ (0.15)	$ (0.16)	$ (0.15)	$ (0.12)	$ (0.59)

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements that are based upon current expectations. Our actual results and the timing of events could differ materially from those anticipated in our forward-looking statements as a result of many factors, including those set forth under "Risk Factors", "Forward-Looking Statements" and elsewhere in this report.

You should read the following discussion and analysis in conjunction with "Selected Financial Data" and the financial statements and related notes included elsewhere in this report.

Overview

Paradigm Genetics, Inc. (the "Company" or "Paradigm") was founded on September 9, 1997 as a biotechnology company driving research and development productivity by focusing its integrated suite of technologies on the product development cycle, from target discovery to enhancement of the safety and efficacy profiles. The Company uses a systems biology approach to understand gene function in the context of biological pathways and to develop assays and biomarkers for molecular diagnostic solutions for life sciences companies.

We currently have commercial partnerships with Bayer Crop Sciences ("Bayer") in the area of crop production, The Monsanto Company ("Monsanto") in the areas of crop production and nutrition and VDDI Pharmaceuticals in the area of infectious diseases. Our commercial partnership with Bayer was signed in September 1998 and was extended in June 2001. Under the terms of the agreement, the companies will collaborate on herbicide discovery for up to an additional five years through September 2006. This includes three years of committed funding through September 2004, plus a two-year option through September 2006. The commercial partnership with Monsanto was signed in November 1999 and began contributing revenues in the second quarter of fiscal year 2000. During September 2001, we announced that Monsanto had amended the commercial partnership agreement by eliminating its option to terminate the agreement without cause in exchange for broader commercialization rights. This amendment commits Monsanto to a total partnership term of six years with committed funding through January 2006. During November 2002 we announced that the research plan under the commercial partnership with Monsanto had been revised. The revision to the research plan slowed the timing of our revenue recognition during the fourth quarter 2002, but will not alter the amount of revenue we will recognize from the commercial partnership. Our commercial partnership with VDDI Pharmaceuticals was signed in February 2002, for the development of antibiotics for the treatment of gram-positive bacterial infections. Under the agreement, we used our metabolic profiling platform to prioritize lead compounds targeting the essential bacterial enzyme nicotinamide adenine dinucleotide synthetase for further preclinical development. VDDI Pharmaceuticals began contributing to our revenues in the third quarter of 2002. This commercial partnership ended in December 2002, and as such will no longer contribute to our revenue.

We also have a $23.8 million five year contract with NIEHS that was signed in September 2002 and began contributing to our revenue in the fourth quarter of 2002. Under the terms of the contract we will use our technologies to determine how toxicants work and cause damage at the cellular level.

In addition we have three government grants. Our Advanced Technology Program (ATP) grant from NIST was awarded in June 2002 for $11.7 million over five-years. The grant will be shared equally between Paradigm and LION Bioscience A.G. This grant is in the area of target validation and will support the development of a Target Assessment Technologies Suite (TATS), which is intended to increase the number and success rate of validated targets for product development by the pharmaceutical and other life sciences industries. We anticipate significant commercial applications for the new technologies. The remaining two grants are with the National Science Foundation (NSF) in the areas of modification of terpenoid production in mint, and the development of a high throughput gene discovery system in arabidopsis using geminivirus. The first grant was awarded in June 2002 for modification of terpenoid production in mint, and in July 2002 a second grant was awarded for a high

throughput gene discovery system in arabidopsis using geminivirus. During the year ended December 31, 2001 we generated revenues from a grant from the U.S. Department of Energy that ended in June 2001.

We have invested heavily in developing our *GeneFunction Factory*™, metabolic profiling platform, and *FunctionFinder*™ systems. We occupy office and laboratory space totaling approximately 106,600 square feet. During 2002 we reorganized our operations to better focus our resources in order to grow the human healthcare and agricultural businesses. All costs associated with the reorganization were incurred and expensed during 2002.

We have incurred significant losses since our inception. As of December 31, 2002, our accumulated deficit was approximately $72.4 million and total stockholders' equity was approximately $30.7 million. Our net loss increased to approximately $23.5 million for the year ended December 31, 2002 compared to approximately $16.0 million for the year ended December 31, 2001. The primary reason for the increase in our net loss was due to lower revenues from our commercial partnership with Bayer, offset, in part, by a decrease in total operating expenses. Operating expenses decreased to approximately $37.3 million for the year ended December 31, 2002, from approximately $40.4 million for the year ended December 31, 2001. We expect to incur additional operating losses for the foreseeable future as we continue to advance our internal research and development programs, primarily in the healthcare area.

Critical Accounting Policies

The preparation of financial statements, in conformity with accounting principles generally accepted in the United States, requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, 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.

Revenues are derived from commercial partnerships and government contracts and grants. Payments from our commercial contracts are generally related to refundable or nonfundable fees, milestone achievements or assay deliveries. Payments for refundable and nonrefundable fees and milestone achievements are recognized as revenues on a progress to completion basis over the term of the respective commercial partnership, except with respect to refundable fees for which revenue recognition does not commence until the refund right expires. Payments related to assay deliveries are recognized as revenues when accepted by the other party. Payments received under the Company's commercial partnerships and government contracts and grants are generally non-refundable regardless of the outcome of the future research and development activities to be performed by the Company. Payments from government contracts and grants are recognized as revenues as related expenses are incurred over the term of each contract or grant.

Progress to completion under commercial partnerships is measured based on a comparison of the number of genes analyzed to the total number of genes to be analyzed, on a contract by contract basis. To the extent payments received exceed revenue recognized for each contract or grant the excess portion of such payments are recorded as deferred revenues. To the extent revenues recognized exceed payments received for each contract or grant the excess of such revenues are recorded as accounts receivable. The Company is currently recognizing revenue in accordance with Staff Accounting Bulletin No. 101 ("SAB 101") issued by the Securities and Exchange Commission.

Results of Operations

Years Ended December 31, 2002 and 2001.

Revenues. Revenues are comprised of amounts recognized under our commercial partnerships, our contract with NIEHS, our ATP grant, two grants from NSF and a grant from the U.S. Department of Energy that ended in June 2001. Total revenues decreased 30% to approximately $17.2 million for the year ended

December 31, 2002, as compared to approximately $24.5 million for the year ended December 31, 2001. The decrease was primarily due to lower throughput in our *GeneFunction Factory*™ related to work on our commercial partnership with Bayer, and the expiration of our U.S. Department of Energy grant in June 2001. This decrease was offset, in part, by newly generated revenues from our commercial partnership with VDDI Pharmaceuticals that ended in December 2002, our contract with NIEHS, our ATP grant and our two grants with NSF.

Revenues relating to our commercial partnership with Bayer decreased to approximately $4.7 million for the year ended December 31, 2002 compared to approximately $13.1 million for the year ended December 31, 2001. During the year ended December 31, 2001, our commercial partnership with Bayer was expanded and extended for up to an additional six years, through September 2004, with a further two year option period through September 2006. We have completed the majority of the work under this commercial partnership and are as of December 31, 2002 ahead of schedule. As a result we have an accounts receivable balance of approximately $4.4 million relating to Bayer, of which approximately $3.7 million is classified as current and $0.7 million is classified as long term. At the end of 2002, we were substantially ahead of schedule for the gene discovery component of our work for Bayer. Under the terms of our agreement, payments from Bayer for this gene discovery work are fixed and are paid quarterly regardless. We expect that revenues related to this commercial partnership will decline in 2003 when compared to 2002, given that most of the work currently planned has been completed.

Revenues relating to our commercial partnership with Monsanto decreased to approximately $11.0 million for the year ended December 31, 2002, from approximately $11.2 million for the year ended December 31, 2001. We expect that revenues related to this commercial partnership will remain flat in 2003 when compared to 2002.

Our commercial partnership with VDDI Pharmaceuticals commenced in February 2002. Revenues for the year ended December 31, 2002 from this contract were approximately $1.0 million. This commercial partnership ended in December 2002 and as such will no longer contribute to our revenue.

Our government contract with NIEHS commenced in September 2002. Revenues for the year ended December 31, 2002 were approximately $63,000. We expect that that revenue related to this contract will increase in 2003 when compared to 2002.

Grant revenues increased to approximately $360,000 for the year ended December 31, 2002 compared to approximately $130,000 for the year ended December 31, 2001. Grant revenues for the year ended December 31, 2002 were generated from our ATP grant and our two new grants with NSF. Grant revenues for the year ended December 31, 2001 were generated from the U.S. Department of Energy grant. We are expecting that our grant revenues will increase in 2003 when compared to 2002, due to revenues from our ATP grant increasing in 2003 offset, in part, by decreases in our grant revenue from NSF as one of the grants ended in December 2002 and the other ends in June 2003.

Research and Development Expenses. Research and development expenses consist primarily of personnel costs, including the recognition of deferred compensation, costs of supplies, facility costs, license fees and depreciation of laboratory equipment. Research and development expenses decreased 6% to approximately $26.4 million for the year ended December 31, 2002 compared to approximately $28.0 million for the year ended December 31, 2001. Of this decrease, approximately $0.7 million was due to lower personnel costs related to a decrease in the number of research and development staff, approximately $1.1 million was due to lower supplies costs, approximately $1.1 million was due to lower consulting fees paid, approximately $0.2 was due to the lower amortization of deferred compensation, and approximately $0.7 million was due to lower depreciation expenses. These decreases were offset in part, by approximately $1.1 million increase in facilities costs, approximately $0.6 million in repairs and maintenance expenses and approximately $0.2 million in license fees. During 2002 our operations were reorganized to better enable us to focus our resources on our core business opportunities, resulting in a reduction in our research and development expenses. All related costs were incurred and expensed

during 2002. We are expecting research and development expenses to increase in 2003 as compared to 2002 as we invest in our healthcare initiatives and ramp up work on our contract with NIEHS.

Selling, General and Administrative Expense. Selling, general and administrative expenses consist primarily of personnel costs, including the recognition of deferred compensation expense, professional expenses, such as legal and accounting fees, facilities costs, business development costs, taxes and insurance costs and depreciation. Selling, general and administrative expenses decreased 12% to approximately $10.9 million for the year ended December 31, 2002 compared to approximately $12.4 million for the year ended December 31, 2001. Of this decrease, approximately $0.2 million was due to lower personnel costs related to a decrease in the number of selling, general and administrative staff, approximately $0.2 million was due to an decrease in depreciation related to facilities and approximately $0.9 million was due to a one time charge taken in 2001 related to an acquisition that we are no longer pursuing. We are expecting selling, general and administrative expense to decrease in 2003 compared to 2002 as we continue to realize the benefits of our cost cutting initiatives undertaken in 2002.

Divestiture. During February 2003 we sold our plant genotyping business, ParaGen, to DNA Landmarks. We are reporting the operating losses from ParaGen, the related write-off of goodwill and associated assets, offset in part by approximately $300,000 of proceeds from the sale as loss from discontinued operations of $3.2 million. We are expecting a minimal income contribution from discontinued operations as we recognize royalties from the sale during 2003. We purchased ParaGen in 2001 from Celera for 422,459 shares of our common stock, which were subsequently registered for resale on an S-3 registration statement.

Stock-Based Compensation Expense. Stock-based compensation expense represents the amortization of deferred compensation related to stock options granted during 2000 to employees at an exercise price below the estimated fair value of our common stock at the date of grant. Deferred compensation is amortized over the vesting period of the related stock options, which is generally four years. We recognized approximately $0.7 million in non-cash compensation expense related to amortization of deferred compensation in 2002 as compared to approximately $1.1 million in 2001.

Deferred compensation for options granted to employees has been determined as the difference between the estimated fair value of our common stock for financial reporting purposes on the date the options were granted and the exercise price. Deferred compensation for options granted to consultants has been determined in accordance with Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" as the fair value of equity instruments issued. We did not issue stock options at below fair market value in 2002 or 2001.

Interest Income (Expense), Net. Interest income (expense), net represents interest earned on our cash, cash equivalents and short-term and long-term investments, offset by interest expense on long-term debt and capital leases. Interest income (expense) net, increased to an expense of approximately $185,000 for the year ended December 31, 2002 compared to $39,000 for the year ended December 31, 2001. This increase was attributable to a reduction in interest earned on our cash balances offset by a decrease in our interest expense. We expect that net interest expense will continue to increase as we use our cash balances to fund our operations and service our debt.

Net Loss. Net loss increased 46% to approximately $23.5 million for the year ended December 31, 2002, compared to approximately $16.0 million for the year ended December 31, 2001. The increase in the net loss was primarily due to a decrease in revenues between the two periods and the loss from discontinued operations related to ParaGen, offset in part by savings related to lower research and development costs and lower selling, general and administrative costs.

Years Ended December 31, 2001 and 2000.

Revenues. Revenues are comprised of amounts recognized under our commercial partnerships and a grant from the U.S. Department of Energy that ended in June 2001. Total revenues increased 137% to approximately

$24.5 million for the year ended December 31, 2001, as compared to approximately $10.3 million for the year ended December 31, 2000. The increase was primarily the result of higher throughput in our *GeneFunction Factory*™ and the delivery to Bayer of a number of herbicide assays during the year.

Revenues relating to our commercial partnership with Bayer increased to approximately $13.1 million for the year ended December 31, 2001 compared to approximately $8.6 million for the year ended December 31, 2000. During the year ended December 31, 2001, our commercial partnership with Bayer was expanded and extended for up to an additional six years, through September 2004, with a further two year option period through September 2006. We had completed the majority of the work under this commercial partnership and were as of December 31, 2001 ahead of schedule. As a result we had an accounts receivable balance of approximately $5.2 million relating to Bayer, of which approximately $3.7 million is classified as current and $1.5 million is classified as long term. At the end of 2001, we were substantially ahead of schedule for the gene discovery component of our work for Bayer. Under the terms of our agreement, payments from Bayer for this gene discovery work are fixed and are paid quarterly regardless.

Revenues relating to our commercial partnership with Monsanto increased to approximately $11.2 million for the year ended December 31, 2001, from approximately $1.2 million for the year ended December 31, 2000. This increase was primarily the result of an increase in throughput in our *GeneFunction Factory*™.

Grant revenues decreased 74% to approximately $130,000 for the year ended December 31, 2001 compared to approximately $500,000 for the year ended December 31, 2000, primarily because our grant with the Department of Energy ended in June 2001.

Research and Development Expenses. Research and development expenses consist primarily of personnel costs, costs of supplies, facility costs, license fees, consulting fees, the recognition of deferred compensation and depreciation of laboratory equipment. Research and development expenses increased 54% to approximately $28.0 million in 2001 compared to approximately $18.2 million in 2000. Of this increase, approximately $3.9 million was due to higher personnel costs related to an increase in the number of research and development staff, approximately $0.4 million was due to higher supplies costs, approximately $1.9 million was due to higher facilities costs, approximately $0.3 million was due to additional license fees, $1.2 million was due to additional consulting fees, approximately $0.1 was due to the amortization of deferred compensation, and approximately $2.6 million was due to depreciation of additional laboratory equipment to support our commercial partnership agreements and develop our core technology.

Selling, General and Administrative Expenses. Selling, general and administrative expenses consist primarily of personnel costs, professional expenses, such as legal and accounting fees, facilities costs, business development costs, depreciation, a one time charge related to an acquisition that we are no longer pursuing and the recognition of deferred compensation. Selling, general and administrative expenses increased 22% to approximately $12.4 million in 2001 compared to approximately $10.1 million in 2000. Of this increase, approximately $800,000 was due to higher personnel costs related to an increase in the number of selling, general and administrative staff, approximately $400,000 was due to an increase in professional expenses, and approximately $900,000 was due to a one time charge related to an acquisition that we are no longer pursuing.

Stock-Based Compensation Expense. Stock-based compensation expense represents the amortization of deferred compensation related to stock options granted during 2000 to employees at an exercise price below the estimated fair value of our common stock at the date of grant. Deferred compensation is amortized over the vesting period of the related stock options, which is generally four years. We recognized approximately $1.1 million in non-cash compensation expense related to amortization of deferred compensation in 2001 as compared to approximately $1.4 million in 2000.

Deferred compensation for options granted to employees has been determined as the difference between the estimated fair value for financial reporting purposes of our common stock on the date the options were granted and the exercise price. Deferred compensation for options granted to consultants has been determined in accordance with Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" as the fair value of equity instruments issued. In connection with the grant of stock options to employees, we recorded deferred compensation of $0 in 2001 compared to approximately $1.3 million in 2000. The decrease in deferred compensation is because we did not issue stock options at below fair market value in 2001.

Interest Income (Expense), Net. Interest income (expense), net represents interest earned on our cash, cash equivalents and short-term investments and long-term investments offset by interest expense on long-term debt and capital leases. Interest expense, net was approximately $39,000 in 2001, compared to an income of approximately $1.3 million in 2000. This change was attributable to a decrease in interest we earned on our cash and investments and increases in interest paid on notes payable secured by capital equipment purchases.

Net Loss. Net loss decreased 46% to approximately $16.1 million for the year ended December 31, 2001, compared to approximately $29.7 million for the year ended December 31, 2000. The decrease in the net loss was primarily due to an increase in revenues between the two periods and the recognition of the beneficial conversion of Series C Preferred Stock in 2000, offset in part by additional expenses related to higher research and development costs, higher selling, general and administrative costs.

Liquidity and Capital Resources

We have historically financed our operations through the sale of common and preferred stock, debt and capital lease financing, payments received from commercial partnerships and government grants. From our inception through December 31, 2002, we have raised an aggregate of approximately $95.5 million in equity issues, including approximately $26.9 million in net cash proceeds from the sale of preferred stock (approximately $5.9 million from Series A in 1997, approximately $6.0 million from Series B in 1998 and approximately $15.0 million from Series C in 2000) and approximately $68.6 million in net cash proceeds from the sale of common stock (approximately $42.5 million from our initial public offering in 2000 and approximately $26.1 million from our secondary offering in 2001). We also raised approximately $20.6 million in proceeds from secured debt financing (approximately $0.3 million in 1997, approximately $3.7 million in 1998, approximately $5.8 million in 1999, approximately $6.9 million in 2000 and approximately $3.9 million in 2001).

We had cash, cash equivalents, short-term investments and long-term investments totaling approximately $21.2 million at December 31, 2002, $43.0 million at December 31, 2001 and $44.5 million at December 31, 2000. We are exposed to interest rate fluctuations on cash equivalents and short-term and long-term investments, which are invested in financial instruments with interest rates based on financial market conditions.

We had a working capital deficit of approximately $1.1 million at December 31, 2002, $4.9 million at December 31, 2001, and working capital of approximately $16.0 million at December 31, 2000. The decrease in the working capital deficit between 2002 and 2001 was primarily due to the reduction in the use of cash to support our operations and make our debt payments. The decrease in working capital between 2001 and 2000 was primarily due to the investment of some of our cash balance in long-term investments. If we were to include long-term investments in our working capital, we would have had working capital of approximately $9.2 million at December 31, 2002, S27.3 million at December 31, 2001 and approximately $24.5 million at December 31, 2000.

Annual maturities of long-term debt subsequent to 2002 are approximately $4.1 million in 2003, approximately $2.8 million in 2004, and approximately $404,000 in 2005. In addition, we have several noncancellable operating leases pertaining to office space and equipment. Our minimum lease payments, under these leases, are approximately $1.8 million in 2003, approximately $1.9 million in 2004, approximately $1.9

million in 2005, approximately $1.9 million in 2006, approximately $1.9 million in 2007, and approximately $6.0 million thereafter.

Operating activities used cash of approximately $13.3 million in 2002, approximately $19.9 million in 2001 and approximately $4.4 million in 2000. Cash used in operating activities was primarily related to operating losses.

Investing activities provided cash of approximately $20.4 million in 2002, used cash of approximately $2.2 million in 2001 and used cash of approximately $57.2 million in 2000. Investing activities consist primarily of net maturities of investments offset, in part, by additions to property and equipment. In 2002 we had a net maturity of investments in the amount of $21.6 million compared to $5.6 million in 2001 and a net purchase of investments in 2001 of $38.9 million. During 2002 and 2001 we used cash from net maturities to support our operations. During 2000 we invested the cash received from our initial public offering which resulted in a net purchase of investments. Capital expenditures totaled approximately $1.2 million in 2002, $7.8 million in 2001 and approximately $18.3 million in 2000. During 2002 we decreased our capital expenditures compared to 2001. During 2001 we continued our investment in our *GeneFunction Factory™,* but at a decreased rate from 2000, and we increased our investment in our metabolic profiling platform. These investments include laboratory and data processing equipment and leasehold improvements. We expect to continue to make investments in the purchase of property and equipment to support our operations. A portion of our cash may be used to acquire or invest in complementary businesses, products or technologies, or to obtain the right to use such complementary technologies.

Financing activities used cash of approximately $7.4 million in 2002, provided cash of approximately $26.2 million in 2001 and provided cash of approximately $63.3 million in 2000. Cash used in financing activities in 2002 resulted from partial repayments of our notes payable for equipment financing. Cash provided by financing activities in 2001 resulted from the receipt of approximately $26.1 million in net proceeds from our secondary offering. In 2000 we received approximately $42.5 million in net proceeds from our initial public offering and approximately $15.0 million in net proceeds from the sale of Series C Preferred Stock. In addition, we had net repayments under our notes payable for equipment financing of approximately $7.2 million in 2002, $175,000 in 2001 and net borrowing of approximately $5.0 million in 2000.

We expect to continue expanding our operations through internal growth and, possibly, through strategic acquisitions. We expect these activities will be funded from existing cash, cash flow from operations, issuances of our stock, and borrowings under our credit facilities. We believe that these sources of liquidity will be sufficient to fund our operations into 2004. From time to time, we evaluate potential acquisitions and other growth opportunities, which might require additional external financing, and we might seek funds from public or private issuances of equity or debt securities.

Our common stock is currently at risk for delisting from the Nasdaq National Market. Delisting could inhibit, if not preclude, our ability to raise additional working capital on acceptable terms, if at all, or to utilize our stock as full or partial consideration for the acquisition of any lines of business from third parties. See "Risk Factors—Our common stock may be delisted from Nasdaq."

Recently Issued Accounting Standards

In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 143, "Accounting for Asset Retirement Obligations" ("SFAS No. 143"). SFAS No. 143 requires recording the fair value of a liability for an asset retirement obligation in the period in which it is incurred, and a corresponding increase in the carrying value of the related long-lived asset. Over time, the liability is accreted using the original discount rate when the liability was initially recognized, and the capitalized cost is depreciated over the useful life of the related asset. Upon settlement of the liability, it is either settled for its recorded amount or a gain or loss upon settlement is recorded. The provisions of SFAS No. 143 will be effective for fiscal years beginning after June 15, 2002. The adoption of SFAS No. 143 is not expected to have any impact on the Company's financial statements or results of operations.

In October 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" ("SFAS No. 144"). SFAS No. 144 supersedes FASB Statement No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of" ("SFAS No. 121") and Accounting Principles Board Opinion No. 30, "Reporting the Results of Operations—Reporting the Effects of Disposal of a Segment of Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions" ("APB No. 30"). SFAS No. 144, while retaining the fundamental recognition and measurement provision of SFAS No. 121, establishes a "primary-asset" approach to determining the cash flow estimation period for a group of assets and liabilities. Similarly, SFAS No. 144 retains the basic provisions of APB No. 30, but broadens the presentation to include a component of an entity. In addition, discontinued operations are no longer measured on a net realizable value basis and future operating losses are no longer recognized before they occur. Rather, discontinued operations are carried at the lower of carrying amount or fair value less cost to sell. Application of the provisions of SFAS No. 144 is required for fiscal years beginning after December 15, 2001. As a result of the adoption of SFAS No. 144, the Company's closing of Paragen's operations was treated as discontinued operations.

In June 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" ("SFAS No. 146"). SFAS No. 146 nullifies Emerging Issues Task Force Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)" ("EITF No. 94-3"). SFAS No. 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred. This is in contrast to EITF 94-3 that required recognition of a liability upon an entity's commitment to an exit plan. SFAS No. 146 concludes that a commitment, by itself, does not create a present obligation meeting the definition of a liability. This statement establishes fair value as the objective for initial measurement of the liability. The provisions of SFAS No. 146 are effective for exit or disposal activities that are initiated after December 31, 2002. The adoption of SFAS No. 146 is not expected to have any impact on the Company's financial statements or results of operations.

In November 2002, the Financial Accounting Standards Board issued Financial Accounting Series FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others—an interpretation of FASB Statements No. 5, 57, and 107 and rescission of FASB Interpretation No. 34" ("FIN No. 45"). FIN No. 45 elaborates on the disclosures to be made by a guarantor in its interim and annual financial statements regarding its obligations under certain guarantees that it has issued. It also clarifies that a guarantor is required to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. The initial recognition and initial measurement provisions of FIN No. 45 are applicable on a prospective basis to guarantees issued or modified after December 31, 2002, irrespective of the guarantor's fiscal year-end. The disclosure requirements are effective for financial statements of interim or annual periods ending after December 15, 2002. The interpretive guidance incorporated without change from Interpretation 34 continues to be required for financial statements for fiscal years ending after June 15, 1981—the effective date of Interpretation 34. The adoption of FIN No. 45 is not expected to have any impact on the Company's financial statements or results of operations.

In December 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure—an amendment of FASB Statement No. 123" ("SFAS No. 148") which amends FASB Statement No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for an entity that voluntarily changes to the fair value based method of accounting for stock-based employee compensation. It also amends the disclosure provisions of that Statement to require prominent disclosure about the effects on reported net income of an entity's accounting policy decisions with respect to stock-based employee compensation. SFAS No. 148 amends Accounting Principles Board Opinion No. 28, "Interim Financial Reporting," to require prominent disclosure in interim financial information. The provisions of SFAS No. 148 are effective for financial statements for fiscal years ending after December 15, 2002 with the interim reporting provisions effective for reporting periods beginning after December 15, 2002. The adoption of SFAS No. 148 did not have any material impact on the Company's financial statements or results of operations. The required disclosures for the year ended December 31, 2002 are presented in Note 2.

Potential Volatility of Quarterly Operating Results and Stock Price

Our quarterly and annual operating results have fluctuated, and we expect that they will continue to fluctuate in the future. Factors that could cause these fluctuations include:

- the timing of the initiation, progress or cancellation of commercial partnerships
- the mix of work performed for our commercial partners in a particular period
- the timing of internal expansion costs, and
- the timing and amount of costs associated with evaluating and integrating acquisitions, if any.

Fluctuations in quarterly results or other factors beyond our control could affect the market price of our common stock. Such factors include changes in earnings estimates by analysts, market conditions in our industry, changes in pharmaceutical, agri-chemical, and biotechnology industries, and general economic conditions. Any effect on our common stock could be unrelated to our longer-term operating performance.

Subsequent Events

On February 03, 2003 we finalized the sale of our plant genotyping business, ParaGen, to DNA Landmark's. The ParaGen business covers marker discovery, marker-assisted breeding and variety identification.

On March 26, 2003 we announced our launch of a gene expression microarray services business. This new business builds on the company's expertise in DNA microarray processing and data analysis, which was validated last fall with the signing of a $23.8 million toxicogenomics contract with the National Institute of Environmental Health Sciences. For that contract, Paradigm will process thousands of DNA microarrays through its gene expression profiling platform.

To support the start-up of its microarray services business, Paradigm also announced today that it had entered into a co-marketing agreement with Agilent Technologies. Under the terms of the agreement, Paradigm will be a preferred service provider for Agilent's DNA microarray products. Agilent's sales force will provide referrals to Paradigm of its gene expression customers interested in outsourcing their microarray research.

FORWARD-LOOKING STATEMENTS

Our forecast of the period of time through which our financial resources will be adequate to support our operations and other statements contained in this report are forward-looking and involve risks and uncertainties. Actual results could vary as a result of a number of factors. We believe that our existing cash and investment securities and anticipated cash flow from existing revenue sources will be sufficient to support our current operating plan into 2004. We have based this estimate on assumptions that may prove to be wrong. It is possible that we may seek additional funding within this time frame. We may raise additional funds through public or private financing, collaborative relationships or other arrangements. We cannot assure you that additional funding, if sought, will be available or, even if available, will be available on terms favorable to us. Further, any additional equity financing may be dilutive to stockholders, and debt financing, if available, may involve restrictive covenants. Our failure to raise capital when needed may harm our business and operating results. Our future capital requirements will depend on many factors, including:

- the number, breadth and progress of our research programs
- the achievement of the milestones under certain of our existing commercial partnerships
- our ability to establish additional and maintain current and additional commercial partnerships
- our commercial partners' success in commercializing products developed under our commercial partnership agreements
- our success in commercializing products to which we have retained the rights under our commercial partnerships
- the costs incurred in enforcing and defending our patent claims and other intellectual property rights, and
- the costs and timing of obtaining regulatory approvals for any of our products.

This report contains other forward-looking statements, including statements regarding: our ability to successfully develop and improve our *GeneFunction Factory*™, *FunctionFinder*™ system, our Gene to Cell System™ approach, our metabolic profiling platform, databases and other technologies; the future prospects of our metabolomic platform, including the potential of the platform to improve the efficiency and lower the cost of drug discovery, decrease the time to market for new drugs, reduce toxic side effects of drugs, complement other genomic tools, and attract commercial partners to be a more efficient and proximal indicator of cellular physiology than genomics and proteomics platforms; our ability to industrialize the process of gene function discovery and metabolomics and generate information enabling the development of novel products; our ability to establish intellectual property protection for our gene function information, databases, processes and other technologies; product development and commercialization efforts; our strategy and market opportunities, anticipated increases in our revenues, and timing of revenues from commercial partnerships; our ability to meet or exceed our milestone targets and earn royalties under our commercial partnerships; our ability to enter into new partnerships and alliances; our intended use of the proceeds from our direct offering and other financial resources; our research and development and other expenses; our operational and legal risks; our ability to remain listed on the Nasdaq National Market or become listed on the Nasdaq SmallCap Market; and building shareholder value.

Such statements are based on management's current expectations and are subject to a number of risks, factors and uncertainties that may cause actual results, events and performance to differ materially from those referred to in the forward-looking statements. These risks include, but are not limited to, our early stage of development, history of net losses, technological and product development uncertainties, reliance on research collaborations, uncertainty of additional funding and ability to protect our patents and proprietary rights. These and other risks are discussed below in Part I, of this report, titled "Business—Risk Factors."

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The primary objective of our investment activities is to preserve principal while, at the same time, maximizing yields without significantly increasing risk. To achieve this objective, we maintain our portfolio of cash equivalents, short- and long-term investments in a variety of securities, including both government and corporate obligations and money market funds.

The Company's investments consist of securities of various types and maturities of five years or less, with a maximum average maturity of three years. These securities are classified as available-for-sale. Available-for-sale securities are recorded on the balance sheet at fair market value with unrealized gains or losses reported as part of accumulated other comprehensive income. Gains and losses on investment security transactions are reported on the specific-identification method. Dividend and interest income are recognized when earned. A decline in the market value of any available-for-sale security below cost that is deemed other than temporary results in a charge to earnings and establishes a new cost basis for the security.

The securities held in the Company's investment portfolio are subject to interest rate risk. Changes in interest rates affect the fair market value of the available-for-sale securities. A rise in interest rates would have an adverse impact on the fair market value of fixed rate securities. If interest rates fall, floating rate securities may generate less interest income. The Company manages its exposure to interest rate risks through investing in securities with maturities of five years, or less.

Additionally, the Company is exposed to risk from changes in interest rates as a result of its borrowing activities. At December 31, 2002, the Company had total debt of $7.7 million. The Company's debt consists of equipment financing loans with approximately $7.3 million outstanding, with interest rates ranging from 11.3% to 14.2%; and capital lease obligations of approximately $379,000 outstanding, with effective interest rates ranging from 10.3% to 12.2%. See Notes 10 and 14 of Notes to Financial Statements.

Paradigm was not exposed to material market risks associated with activities in derivative financial instruments, other financial instruments, or commodity instruments as of the year ended December 31, 2002.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements required pursuant to this item are included in Item 15 of this Annual Report on Form 10K and are presented beginning on page F-1.

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

Not Applicable.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

We incorporate herein by reference the information under the captions "Management" and "Section 16(a) Beneficial Ownership Reporting Compliance" in our Proxy Statement to be filed within 120 days after the end of our fiscal year (the "Proxy Statement").

ITEM 11. EXECUTIVE COMPENSATION

We incorporate herein by reference the information under the caption "Executive Compensation" contained in the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

We incorporate herein by reference the information under the captions, "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" contained in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

We incorporate herein by reference the information under the caption "Certain Relationships and Related Transactions" contained in the Proxy Statement.

PART IV

ITEM 14. CONTROLS AND PROCEDURES

(a) *Evaluation of Disclosure Controls and Procedures.* The Company's principal executive officer and principal financial officer, after evaluating the effectiveness of the Company's disclosure controls and procedures (as defined in Exchange Act Rules 13a-14(c) and 15d-14(c)) on March 20, 2003, have concluded that, based on such evaluation, the Company's disclosure controls and procedures were adequate and effective to ensure that material information relating to the Company, was made known to them by others within those entities, particularly during the period in which this Annual Report on Form 10-K was being prepared.

(b) *Changes in Internal Controls.* There were no significant changes in the Company's internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, nor were there any significant deficiencies or material weaknesses in the Company's internal controls. Accordingly, no corrective actions were required or undertaken.

In designing and evaluating the disclosure controls and procedures, the Company's management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

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

(a)(1) *Financial Statements.* The following financial statements, and related notes, of Paradigm Genetics, Inc. and the report of Independent Public Accountants are filed as part of this Form 10-K.

Index to Financial Statements

(a)(2) *Financial Statement Schedules.* All financial statement schedules required by Item 15(a)(2) have been omitted because they are inapplicable or because the required information has been included in the Financial Statements or Notes thereto.

(a)(3) *Exhibits.*

The following is a list of exhibits filed as part of this report on Form 10-K.

Exhibit Number	Description
*2.1	Plan and Agreement of Merger between Paradigm Genetics, Inc., a North Carolina corporation and Paradigm Genetics, Inc., a Delaware corporation (Filed as Exhibit 2.1)
*3.1	Restated Certificate of Incorporation (Filed as Exhibit 3.2)
**3.2	Amended and Restated By-Laws (Filed as Exhibit 3.2)
*4.1	Form of Common stock Certificate (Filed as Exhibit 4.1)
*10.1†	1998 Stock Option Plan (Filed as Exhibit 10.1)
*10.2	Amended and Restated Registration Rights Agreement, dated January 21, 2000, between the Registrant and certain Founders and Investors (Filed as Exhibit 10.6)

Exhibit Number	Description
*10.3	First Amendment to the Amended and Restated Registration Rights Agreement between the Registrant and certain Investors and Founders (Filed as Exhibit 10.6.1)
*10.4Δ	Agreement by and between Bayer AG and the Registrant dated September 22, 1998, as amended (Filed as Exhibit 10.7)
*10.5Δ	Collaboration Agreement, dated November 17, 1999 by and between the Monsanto Company and the Registrant (Filed as Exhibit 10.8)
*10.6	Warrant to Purchase Common Stock, dated July 20, 1999, issued by the Registrant to TBCC Funding Trust II (Filed as Exhibit 10.44)
*10.7	Warrant to Innotech Investments Limited dated February 12, 1998 (Filed as Exhibit 10.47)
*10.8†	Amendment to the Founder Stock Repurchase and Vesting Agreement between the Registrant and John A. Ryals (Filed as Exhibit 10.13.1)
*10.9†	Amendment to the Founder Stock Repurchase and Vesting Agreement between the Registrant and Jörn Görlach (Filed as Exhibit 10.14.1)
*10.10†	Amendment to the Founder Stock Repurchase and Vesting Agreement between the Registrant and Sandy J. Stewart (Filed as Exhibit 10.15.1)
*10.11†	Amendment to the Founder Stock Repurchase and Vesting Agreement between the Registrant and Scott Uknes (Filed as Exhibit 10.16.1)
*10.12	Amended and Restated Lease Agreement, dated April 2000 between the Registrant and ARE-104 Alexander Road LLC (Filed as Exhibit 10.25.1)
*10.13	Lease Agreement between the Registrant and ARE-104 Alexander Road LLC dated April 2000 (Filed as Exhibit 10.25.2)
*10.14	Tenant Certificate and Agreement, dated January 11, 2000, between the Registrant and ING Investment Management, LLC (Filed as Exhibit 10.29)
*10.15	First Amendment to Warrant to ARE-104 Alexander Road LLC (Filed as Exhibit 10.43.1)
*10.16	Warrant to Purchase Common Stock, dated January 19, 2000, issued by the Registrant to ARE-104 Alexander Road LLC, and Escrow Agreement (Filed as Exhibit 10.45)
*10.17	First Amendment to Warrant to ARE-104 Alexander Road LLC (Filed as Exhibit 10.45.1)
*10.18	First Amendments to Warrants to Intersouth Partners III, LP and Intersouth Partners IV, LP (Filed as Exhibit 10.46.1)
*10.19	First Amendment to Warrant to Innotech Investments Limited (Filed as Exhibit 10.47.1)
*10.20†	2000 Employee, Director and Consultant Stock Option Plan (Filed as Exhibit 10.48)
*10.21†	2000 Employee Stock Purchase Plan (Filed as Exhibit 10.49)
**10.22	Alliance Agreement between LION Bioscience AG and the Registrant dated November 22, 2000 (Filed as Exhibit 10.18)
***10.23	Amendment to the Monsanto/Paradigm Genetics Collaboration Agreement, dated August 30, 2001 (Filed as Exhibit 10.1)
****10.24	Placement Agency Agreement between the Registrant and J.P. Morgan Securities Inc., dated October 16, 2001. (Filed as Exhibit 10.20)
*****10.25	Extension and Amendment of Agreement dated September 21, 1998 between the Registrant and Bayer AG (Filed as Exhibit 10.1)
******10.26	Asset Purchase Agreement, dated as of December 3, 2001, between the Registrant and PE Corporation (NY), acting through its Celera Genomics Group (Filed as Exhibit 10.22)

Exhibit Number	Description
******10.27	Stock Purchase Agreement, dated as of December 3, 2001, between the Registrant and PE Corporation (NY), acting through its Celera Genomics Group (Filed as Exhibit 10.23)
******10.28	Registration Rights Agreement, dated December 20, 2001, between the Registrant and PE Corporation (NY), acting through its Celera Genomics Group (Filed as Exhibit 10.24)
*******10.29†	2002 Non-qualified Stock Option Plan (Filed as Exhibit 10.25)
*10.30	Master Loan and Security Agreement, dated May 13, 1998, between the Registrant and Transamerica Business Credit Corporation (Filed as Exhibit 10.30)
*10.31	Loan and Security Agreement, dated July 20, 1999, between the Registrant and Transamerica Business Credit Corporation (Filed as Exhibit 10.31)
*10.32	Intellectual Property Security Agreement, dated July 20, 1999, between the Registrant and Transamerica Business Credit Corporation (Filed as Exhibit 10.32)
*10.33	Promissory Note, dated July 23, 1999, issued by the Registrant to Transamerica Business Credit Corporation (Filed as Exhibit 10.33)
*10.34	Master Loan and Security Agreement, dated June 18, 1998, between the Registrant and Oxford Venture Leasing LLC (Filed as Exhibit 10.34)
10.35#	Amendment to the Monsanto/Paradigm Genetics Collaboration Agreement, dated September 23, 2002
10.36#	National Institute of Environmental Health Sciences contract with the Registrant.
10.37†	General Claims Release between the Registrant and Ian Howes
10.38†	Separation Agreement and General Claims Release between the Registrant and Athanasios Maroglou, dated March 02, 2002.
10.39†	Agreement related to Separation and Severance between the Registrant and John A. Ryals, Ph.D., dated May 16, 2002.
10.40†	Separation Agreement and General Claims Release between the Registrant and Gary Miller, dated August 09, 2002.
10.41†	Employment Agreement between the Registrant and Heinrich Gugger, dated November 22, 2002.
10.42†	Employment Agreement between the Registrant and Philip R. Alfano, dated November 22, 2002.
10.43†	Employment Agreement between the Registrant and Thomas Colatsky, dated November 22, 2002.
10.44†	Employment Agreement between the Registrant and J. Barry Buzogany, dated November 08, 2002.
10.45†	Agreement Related to Severance between the Registrant and James D. Bucci, dated November 22, 2002.
10.46†	Agreement Related to Severance between the Registrant and Keith R. Davis, dated November 22, 2002.
10.47†	Agreement Related to Severance between the Registrant and John E. Hamer, dated November 22, 2002.
10.48†	2003 Employee, Director and Consultant Stock Plan
23.1	Consent of PricewaterhouseCoopers LLP
99.1	Certification pursuant to Section 906 of Sarbanes-Oxley Act of 2002.

Exhibit Number	Description
99.2	Certification of President and Chief Executive Officer pursuant to Section 302 of Sarbanes-Oxley Act of 2002.
99.3	Certification of Vice President, Finance, Chief Accounting Officer and Treasurer pursuant to Section 302 of Sarbanes-Oxley Act of 2002.

* Previously filed with the Commission as Exhibits to, and incorporated herein by reference from, the Company's Registration Statement filed on Form S-1 (File No. 333-30758)

** Previously filed and incorporated herein by reference from the Form 10-K for the period ending December 31, 2000.

*** Previously filed and incorporated herein by reference from the Form 10-Q for the period ending September 30, 2001.

**** Previously filed and incorporated herein by reference from the Form 8-K filed on October 16, 2001.

***** Previously filed and incorporated herein by reference from the Form 10-Q for the period ending June 30, 2001.

****** Previously filed and incorporated herein by reference from the Form 10-K for the period ending December 31, 2001.

******* Previously filed and incorporated herein by reference from the Form 10-Q for the period ending September 31, 2002.

Δ The Securities and Exchange Commission has previously granted confidential treatment with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

† Management contract or compensatory plan or arrangement filed in response to Item 15(a)(3) of the instructions to Form 10-K.

Confidential treatment requested from the Securities and Exchange Commission. The portions of the document for which confidential treatment has been granted are marked "Confidential" and such confidential portions have been filed separately with the Securities and Exchange Commission.

Where a document is incorporated by reference from a previous filing, the Exhibit number of the document in that previous filing is indicated in parentheses after the description of such document.

(b) *Reports on Form 8-K*

On November 14, 2002, the Company filed a Report on Form 8-K, in conjunction with its certification of its Form 10-Q for the quarter ended September 30, 2002 pursuant to section 906 of the Sarbanes-Oxley Act of 2002.

On November 12, 2002, the Company filed a Report on Form 8-K, in conjunction with the release of its financial results for the third quarter ended September 30, 2002.

On November 6, 2002, the Company filed a Report on Form 8-K, in conjunction with a press release announcing the appointment of Philip R. Alfano as Vice President, Finance and Chief Financial Officer, and the appointment of J. Barry Buzogany as Vice President, General Counsel and Corporate Secretary.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PARADIGM GENETICS, INC.

By: /s/ HEINRICH GUGGER
Heinrich Gugger
Chief Executive Officer and President

Dated: March 27, 2003

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated below and on the dates indicated.

	Signatures	Title	Date
By:	/s/ HEINRICH GUGGER **Heinrich Gugger**	President and Chief Executive Officer (principal executive officer)	March 27, 2003
By:	/s/ PHILIP R. ALFANO **Philip R. Alfano**	Vice President, Finance, Chief Financial Officer and Treasurer (principal financial and accounting officer)	March 27, 2003
By:	/s/ G. STEVEN BURRILL **G. Steven Burrill**	Director	March 27, 2003
By:	/s/ MICHAEL SUMMERS **Michael Summers**	Director	March 27, 2003
By:	/s/ ROBERT GOODMAN **Robert Goodman**	Director	March 27, 2003
By:	/s/ HENRI ZINSLI **Henri Zinsli**	Director	March 27, 2003
By:	/s/ MARK B. SKALETSKY **Mark B. Skaletsky**	Director	March 27, 2003
By:	/s/ SUSAN K. HARLANDER **Susan K. Harlander**	Director	March 27, 2003
By:	/s/ LEROY E. HOOD **Leroy E. Hood**	Director	March 27, 2003

PARADIGM GENETICS, INC.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT ACCOUNTANTS

The Board of Directors and Stockholders
Paradigm Genetics, Inc.

In our opinion, the accompanying balance sheets and the related statements of operations, of stockholders' equity (deficit), and of cash flows present fairly, in all material respects, the financial position of Paradigm Genetics, Inc. (the "Company") at December 31, 2002 and 2001, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 5 to the financial statements, the Company changed its method of accounting for goodwill upon the adoption of Statement of Financial Accounting Standards No. 142 on January 1, 2002.

As discussed in Note 4 to the financial statements, the Company changed its method of accounting for discontinued operations upon the adoption of Statement of Financial Accounting Standards No. 144 on January 1, 2002.

/s/ PRICEWATERHOUSECOOPERS LLP

Raleigh, North Carolina
January 31, 2003

PARADIGM GENETICS, INC.

BALANCE SHEETS

	December 31, 2002	December 31, 2001
ASSETS		
Current assets:		
Cash and cash equivalents	$ 5,883,907	$ 6,151,521
Short-term investments	5,025,170	4,584,000
Accounts receivable	4,601,100	5,663,337
Interest receivable	267,424	590,042
Prepaid expenses	1,631,429	2,243,905
Total current assets	17,409,030	19,232,805
Restricted cash	1,404,543	1,474,870
Property and equipment, net	22,431,290	27,854,068
Long-term investments	10,323,090	32,256,050
Long-term receivable	733,141	1,539,313
Goodwill	—	1,975,043
Intangible assets	—	350,000
Other assets, net	320,916	404,860
Total assets	$ 52,622,010	$ 85,087,009
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 964,819	$ 2,414,125
Accrued liabilities	1,713,031	1,333,272
Deferred revenue	11,570,848	13,349,810
Long-term debt—current portion	4,093,196	6,762,473
Capital lease obligations—current portion	206,978	296,259
Other liabilities	8,127	8,712
Total current liabilities	18,556,999	24,164,651
Long-term debt, less current portion	3,206,496	7,299,692
Capital lease obligations, less current portion	171,629	378,703
Total liabilities	21,935,124	31,843,046
Commitments (Note 14)		
Stockholders' equity:		
Convertible preferred stock, $0.01 par value; 5,000,000 shares authorized; none issued and outstanding as of December 31, 2002 and 2001	—	—
Common stock, $0.01 par value; 50,000,000 shares authorized; 32,039,593 and 31,936,188 shares issued and outstanding as of December 31, 2002 and 2001, respectively	320,396	319,362
Additional paid-in capital	102,968,385	103,387,223
Deferred compensation	(404,873)	(1,584,201)
Accumulated deficit	(72,404,582)	(48,934,177)
Accumulated other comprehensive income	207,560	55,756
Total stockholders' equity	30,686,886	53,243,963
Total liabilities and stockholders' equity	$ 52,622,010	$ 85,087,009

The accompanying notes are an integral part of the financial statements.

PARADIGM GENETICS, INC.

STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2002	2001	2000
Revenues:			
Commercial partnerships and government contracts	$ 16,823,146	$ 24,337,383	$ 9,837,018
Grant revenues	359,505	129,729	500,004
Total revenues	17,182,651	24,467,112	10,337,022
Operating expenses:			
Research and development (includes $346,060, $561,433 and $449,411, respectively, of stock-based compensation)	26,385,764	28,013,282	19,185,846
Selling, general and administrative (includes $317,277, $510,227 and $959,322, respectively, of stock-based compensation)	10,908,894	12,397,593	10,131,608
Total operating expenses	37,294,658	40,410,875	29,317,454
Loss from operations	(20,112,007)	(15,943,763)	(18,980,432)
Interest income (expense):			
Interest income	1,230,601	1,866,949	2,808,802
Interest expense	(1,415,278)	(1,905,760)	(1,552,290)
Interest income (expense), net	(184,677)	(38,811)	1,256,512
Loss from continuing operations	(20,296,684)	(15,982,574)	(17,723,920)
Discontinued operations:			
Loss from discontinued operations	(617,864)	(65,000)	—
Loss on disposal of assets	(2,555,857)	—	—
Loss from discontinued operations	(3,173,721)	(65,000)	—
Net loss	(23,470,405)	(16,047,574)	(17,723,920)
Beneficial conversion of Series C Preferred Stock	—	—	(12,000,000)
Net loss attributable to common stockholders	$(23,470,405)	$(16,047,574)	$(29,723,920)
Net loss per common share—basic and diluted:			
Loss per share from continuing operations	$ (0.63)	$ (0.59)	$ (1.61)
Loss per share from discontinued operations	(0.10)	—	—
Net loss per common share	$ (0.73)	$ (0.59)	$ (1.61)
Weighted average common shares outstanding—basic and diluted	31,973,527	27,264,022	18,434,804

The accompanying notes are an integral part of the financial statements.

PARADIGM GENETICS, INC.

STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

	Series A Preferred Stock		Series B Preferred Stock		Series C Preferred Stock		Common stock		Additional Paid-In Capital	Deferred Compensation	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount					
Balance at December 31, 1999	7,562,500	$ 5,950,899	2,790,698	$ 5,967,819	—	$ —	5,224,257	$ 52,242	$ 3,529,452	$(3,165,430)	$(15,162,683)	$ —	$(2,827,701)
Issuance of Series C Preferred Stock	—	—	—	—	3,000,000	14,965,192	—	—	—	—	—	—	14,965,192
Issuance of warrants	—	—	—	—	—	—	—	—	361,138	—	—	—	361,138
Beneficial conversion charge Series C Preferred Stock	—	—	—	—	—	12,000,000	—	—	(12,000,000)	—	—	—	—
Sale of common stock in public offerings, net	—	—	—	—	—	—	6,750,000	67,500	42,462,832	—	—	—	42,530,332
Conversion of preferred stock into common stock	(7,562,500)	(5,950,899)	(2,790,698)	(5,967,819)	(3,000,000)	(26,965,192)	13,353,198	133,532	38,750,378	—	—	—	—
Exercise of stock options	—	—	—	—	—	—	434,593	4,346	177,695	—	—	—	182,041
Purchase of restricted stock	—	—	—	—	—	—	(7,442)	(74)	(4,339)	—	—	—	(4,413)
Issue of shares pursuant to the 2000 Employee Stock Purchase Plan	—	—	—	—	—	—	102,059	1,021	606,230	—	—	—	607,251
Unrealized gain on investments in marketable securities	—	—	—	—	—	—	—	—	—	—	—	42,677	42,677
Disgorgement of profits	—	—	—	—	—	—	—	—	72,196	—	—	—	72,196
Deferred compensation	—	—	—	—	—	—	—	—	1,279,976	(1,279,976)	—	—	—
Compensation related to accelerated vesting of stock options	—	—	—	—	—	—	—	—	114,399	—	—	—	114,399
Amortization of deferred compensation	—	—	—	—	—	—	—	—	—	1,294,334	—	—	1,294,334
Net loss	—	—	—	—	—	—	—	—	—	—	(17,723,920)	—	(17,723,920)
Balance at December 31, 2000	—	—	—	—	—	—	25,856,665	258,567	75,349,957	(3,151,072)	(32,886,603)	42,677	39,613,526
Exercise of stock options	—	—	—	—	—	—	249,949	2,500	210,193	—	—	—	212,693
Purchase of restricted stock	—	—	—	—	—	—	(92,068)	(921)	(46,484)	—	—	—	(47,405)
Issue of shares pursuant to the 2000 Employee Stock Purchase Plan	—	—	—	—	—	—	42,030	420	228,588	—	—	—	229,008
Unrealized gain on investments in marketable securities	—	—	—	—	—	—	—	—	—	—	—	13,079	13,079
Sale of common stock in secondary offering, net	—	—	—	—	—	—	5,097,727	50,977	26,047,999	—	—	—	26,098,976
Issuance of common stock for acquisition	—	—	—	—	—	—	422,459	4,225	2,095,775	—	—	—	2,100,000
Exercise of warrants	—	—	—	—	—	—	359,426	3,594	(3,594)	—	—	—	—
Deferred compensation	—	—	—	—	—	—	—	—	(564,053)	564,053	—	—	—
Compensation related to accelerated vesting of stock options	—	—	—	—	—	—	—	—	68,842	—	—	—	68,842
Amortization of deferred compensation										1,002,818			1,002,818
Net loss											(16,047,574)		(16,047,574)
Balance at December 31, 2001	—	—	—	—	—	—	31,936,188	319,362	103,387,223	(1,584,201)	(48,934,177)	55,756	53,243,963
Exercise of stock options	—	—	—	—	—	—	222,305	2,223	153,435	—	—	—	155,658
Purchase of restricted stock	—	—	—	—	—	—	(165,405)	(1,654)	(59,953)	—	—	—	(61,607)
Issue of shares pursuant to the 2000 Employee Stock Purchase Plan	—	—	—	—	—	—	46,505	465	31,671	—	—	—	32,136
Unrealized gain on investments in marketable securities	—	—	—	—	—	—	—	—	—	—	—	151,804	151,804
Expenses related to sale of common stock in secondary offering	—	—	—	—	—	—	—	—	(28,000)	—	—	—	(28,000)
Deferred compensation	—	—	—	—	—	—	—	—	(582,289)	582,289	—	—	—
Compensation related to accelerated vesting of stock options	—	—	—	—	—	—	—	—	66,298	—	—	—	66,298
Amortization of deferred compensation	—	—	—	—	—	—	—	—	—	597,039	—	—	597,039
Net loss	—	—	—	—	—	—	—	—	—	—	(23,470,405)	—	(23,470,405)
Balance at December 31, 2002	—	$ —	—	$ —	—	$ —	32,039,593	$320,396	$102,968,385	$ (404,873)	$(72,404,582)	$207,560	$30,686,886

The accompanying notes are an integral part of the financial statements.

PARADIGM GENETICS, INC.

STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2002	2001	2000
Cash flows from operating activities:			
Net loss	$(23,470,405)	$(16,047,574)	$ (17,723,920)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	5,939,179	4,642,424	3,133,785
Stock based compensation	663,337	1,071,660	1,408,733
Loss (gain) on disposal of assets	499,875	(104,251)	241,148
Write-off of acquisition costs	—	887,279	—
Loss on disposal of discontinued operations	2,555,857	—	—
Changes in operating assets and liabilities			
Accounts receivable	1,868,409	(4,508,284)	(2,437,522)
Interest receivable	322,618	(285,501)	(304,541)
Prepaid expenses and other assets	1,070,120	(434,078)	(1,140,181)
Accounts payable	(1,449,306)	352,849	733,853
Restricted cash	70,327	(670,327)	(560,960)
Accrued and other liabilities.	379,174	(1,090,579)	944,642
Deferred revenue	(1,778,962)	(3,745,795)	11,270,368
Net cash used in operating activities	(13,329,777)	(19,932,177)	(4,434,595)
Cash flows from investing activities:			
Purchase of property and equipment	(1,215,739)	(7,771,878)	(18,321,770)
Purchase of investments	(24,774,888)	(83,192,263)	(146,977,931)
Maturities of investments	46,418,482	88,746,363	108,127,644
Net cash provided by (used in) investing activities	20,427,855	(2,217,778)	(57,172,057)
Cash flows from financing activities:			
Borrowings under notes payable	—	3,903,021	6,931,280
Repayments of notes payable	(7,151,171)	(4,077,854)	(1,898,590)
Repayments of capital lease obligations	(312,708)	(163,867)	(100,075)
Proceeds from issuance of convertible preferred stock	—	—	15,000,000
Convertible preferred stock issuance costs	—	—	(34,808)
Proceeds from stock issued pursuant to employee stock purchase plan	32,136	229,008	607,251
Proceeds from issuance of common stock...		28,037,499	47,250,000
Common stock issuance costs	(28,000)	(1,938,523)	(4,719,668)
Disgorgement of profits	—	—	72,196
Purchase of restricted stock	(61,607)	(47,405)	(4,413)
Proceeds from exercise of stock options	155,658	212,693	182,041
Net cash (used in) provided by financing activities	(7,365,692)	26,154,572	63,285,214
Net (decrease) increase in cash and cash equivalents	(267,614)	4,004,617	1,678,562
Cash and cash equivalents, beginning of year	6,151,521	2,146,904	468,342
Cash and cash equivalents, end of year	$ 5,883,907	$ 6,151,521	$ 2,146,904

The accompanying notes are an integral part of the financial statements.

1. The Company

Paradigm Genetics, Inc. (the "Company" or "Paradigm") was founded on September 9, 1997, and is a biotechnology company driving research and development productivity by focusing its integrated suite of technologies on the product development cycle, from target discovery to the enhancement of safety and efficacy profiles. The Company chooses a systems biology approach to understand gene function in the context of biological pathways and to develop assays and biomarkers for molecular diagnostic solutions for life sciences companies.

The accompanying financial statements have been prepared on a basis which assumes that the Company will continue as a going concern and which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The Company had an accumulated deficit of $72.4 million as of December 31, 2002, incurred a net loss of $23.5 million for the year then ended and expects to incur substantial additional losses in 2003. Over the last 24 months, the Company has incurred cumulative loss from operations of $36.3 million and has used $33.3 million of net cash in operating activities.

The Company has historically financed its operations through the sale of common and preferred stock, debt and capital lease financing, payments received from commercial partnerships and a government grant. As of December 31, 2002, the Company had total cash and investments of $21.2 million, which is comprised of cash and cash equivalents of $5.9 million, short-term investments of $5.0 million, and long-term investments of $10.3 million.

The Company expects to continue expanding the operations through internal growth and, possibly, through strategic acquisitions. The Company expects these activities will be funded from existing cash, cash flow from operations, issuances of stock, and borrowings under the credit facilities. These sources of liquidity will be sufficient to fund the operations into 2004. From time to time, the Company evaluates potential acquisitions and other growth opportunities, which might require additional external financing, and the Company may seek funds from public or private issuances of equity or debt securities.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity 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.

Reclassifications

Certain amounts in the 2001 and 2000 financial statements have been reclassified to conform to the 2002 presentations, with no effect on previously reported net loss, stockholders' equity, or net loss per share.

Cash and Cash Equivalents

The Company considers all highly liquid investments with a maturity of three months or less at the date of purchase to be cash equivalents.

Restricted Cash

Restricted cash comprises cash held in escrow for security deposits on the Company's facilities.

Property and Equipment

Property and equipment is primarily comprised of buildings, laboratory equipment, computer equipment, furniture, and leasehold improvements which are recorded at cost and depreciated using the straight-line method over their estimated useful lives. Expenditures for maintenance and repairs are charged to operations as incurred; major expenditures for renewals and betterments are capitalized and depreciated. Property and equipment acquired under capital leases are being depreciated over their estimated useful lives or the respective lease term, if shorter.

Intangible Assets

Intangible assets consist of goodwill and other identifiable assets acquired in a business combination accounted for by the purchase method. Costs allocated to identifiable intangible assets are amortized over the remaining estimated useful lives of the assets. The excess of the purchase price over the fair value of the tangible and identifiable intangible assets acquired has been recorded as goodwill. The Company evaluates goodwill for impairment at the reporting unit level as of December 31 in accordance with Statement of Financial Accounting Standards No. 142, "Goodwill and other Intangible Assets."

Other Assets

Other assets include deposits for building leases and other deferred costs.

Capitalized Software Costs

The Company accounts for the costs of development of software applications to be sold to or used by third parties in accordance with Statement of Financial Accounting Standards No. 86 "Accounting for the Costs of Computer Software to Be Sold, Leased or Otherwise Marketed." Software development costs are required to be capitalized beginning when a product's technological feasibility has been established and ending when a product is available for general release. To date, the establishment of technological feasibility has substantially coincided with the release of any software products developed. Accordingly, no costs have been capitalized.

Impairment of Long-Lived Assets

The Company evaluates the recoverability of its property and equipment and intangible assets in accordance with Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" ("SFAS No. 144"). SFAS No. 144 requires long-lived assets to be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment is recognized in the event that the net book value of an asset exceeds the future undiscounted cash flows attributable to such asset or the business to which such asset relates and the net book value exceeds fair value. The impairment amount is measured as the amount by which the carrying amount of a long-lived asset (or asset group) exceeds its fair value. The Company recognized an impairment loss of $1,484,786 in 2002 (see note 5.) No impairment loss was required to be recognized during the years ended December 31, 2001 and 2000.

Income Taxes

The Company accounts for income taxes using the liability method which requires the recognition of deferred tax assets or liabilities for the temporary differences between financial reporting and tax bases of the Company's assets and liabilities and for tax carryforwards at enacted statutory rates in effect for the years in

which the differences are expected to reverse. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. In addition, valuation allowances are established where necessary to reduce deferred tax assets to the amounts expected to be realized.

Revenue Recognition

Revenues are derived from commercial partnerships and government contracts and grants. Payments from our commercial contracts are generally related to refundable or nonfundable fees, milestone achievements or assay deliveries. Payments for refundable and nonrefundable fees and milestone achievements are recognized as revenues on a progress to completion basis over the term of the respective commercial partnership, except with respect to refundable fees for which revenue recognition does not commence until the refund right expires. Payments related to assay deliveries are recognized as revenues when accepted by the other party. Payments received under the Company's commercial partnerships and government contracts and grants are generally non-refundable regardless of the outcome of the future research and development activities to be performed by the Company. Payments from government contracts and grants are recognized as revenues as related expenses are incurred over the term of each contract or grant.

Progress to completion under commercial partnerships is measured based on a comparison of the number of genes analyzed to the total number of genes to be analyzed, on a contract by contract basis. To the extent payments received exceed revenue recognized for each contract or grant the excess portion of such payments are recorded as deferred revenues. To the extent revenues recognized exceed payments received for each contract or grant the excess of such revenues are recorded as accounts receivable. The Company is currently recognizing revenue in accordance with Staff Accounting Bulletin No. 101 ("SAB 101") issued by the Securities and Exchange Commission.

Research and Development

Research and development costs include personnel costs, costs of supplies, facility costs, license fees, consulting fees, the recording of deferred compensation and depreciation of laboratory equipment. These costs were incurred by the Company to develop its proprietary *GeneFunction Factory™* and metabolic profiling platform, perform required services under commercial partnerships and government grants and perform research and development on internal projects. Research and development costs are expensed as incurred.

Stock-Based Compensation

The Company accounts for stock-based compensation based on the provisions of Accounting Principles Board ("APB") Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB No. 25") which states that no compensation expense is recorded for stock options or other stock-based awards to employees that are granted with an exercise price equal to or above the estimated fair value of the Company's common stock on the grant date. In the event that stock options are granted with an exercise price below the estimated fair value of the Company's common stock at the grant date, the difference between the fair value of the Company's common stock and the exercise price is recorded as deferred compensation. The Company reversed $582,289 of deferred compensation related to the cancellation of unvested options during the year ended December 31, 2002. The Company recorded deferred compensation of $0 and $1,279,976 for the years ended December 31, 2001 and 2000, respectively. Deferred compensation is amortized to compensation expense over the vesting period of the related stock option. The Company recognized $597,039, $1,002,818 and $1,294,334 in non-cash compensation expense related to amortization of deferred compensation during the years ended December 31, 2002, 2001 and 2000, respectively. The Company has adopted the disclosure requirements Statement of Financial Accounting

Standards No. 123, "Accounting for Stock-Based Compensation," ("SFAS No. 123") as it relates to stock options granted to employees, which requires compensation expense to be disclosed based on the fair value of the options granted at the date of grant. Stock options or warrants granted to non-employees for services are accounted for in accordance with SFAS No. 123, which requires that these options and warrants be valued using the Black-Scholes model. The resulting charge is then recorded as the related services are performed.

The Company continues to apply APB No. 25 and related interpretations in accounting for all of the Company's stock option plans. Had compensation costs for the two plans been determined based on the fair value at the grant date for awards under the plans, consistent with the methods of SFAS No. 123, the Company's net loss and net loss per share (basic and diluted) for the years ended December 31, 2002, 2001 and 2000, would have been increased to the pro forma amounts indicated below:

	2002	2001	2000
Net loss available to common stockholders:			
As reported	$(23,470,405)	$(16,047,574)	$(29,723,920)
Add: Stock-based employee compensation expense included in reported net loss	597,039	1,002,818	1,294,334
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards	3,636,084	4,102,706	3,869,069
SFAS 123 proforma	$(26,509,450)	$(19,147,462)	$(32,298,655)
Loss per common share—basic and diluted:			
As reported	$ (0.73)	$ (0.59)	$ (1.61)
SFAS 123 proforma	$ (0.83)	$ (0.70)	$ (1.75)

The per share weighted average fair value of stock options granted during fiscal 2002, 2001 and 2000 was estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted average assumptions for 2002, 2001 and 2000: expected dividend yield of 0%; risk free interest rates of 3.82% in 2002, 4.74% in 2001 and 4.47% in 2000; expected option lives of approximately four years in 2002, six years in 2001 and six years in 2000; and a volatility factors of 111% in 2002, 106% in 2001 and 110% in 2000.

Cash Flow

The Company made cash payments for interest of $1,415,278, $1,905,760 and $1,552,290 for the years ended December 31, 2002, 2001, and 2000, respectively.

The Company acquired property and equipment through the assumption of capital lease obligations amounting to $591,647 for the year ended December 31, 2001.

In December 2001, the Company acquired Celera's AgGen plant genomics and genotyping business in exchange for 422,459 shares of common stock valued at $2.1 million. The value was allocated $265,000 to fixed assets, $350,000 to various intangible assets, and $1.5 million to goodwill. The business was sold in February 2003. See Discontinued Operations Note 4.

Concentration of Credit Risk

Financial instruments, which potentially subject the Company to a concentration of credit risk, consist principally of cash, investments, and accounts receivables. The Company primarily places its cash, short-term

and long-term investments with high-credit quality financial institutions which invest primarily in U.S. Government securities, commercial paper of prime quality and certificates of deposit guaranteed by banks which are members of the FDIC. Cash deposits are all in financial institutions in the United States. The Company performs ongoing credit evaluations to reduce credit risk and requires no collateral from its customers. Management estimates the allowance for uncollectible accounts based on their historical experience and credit evaluation.

The Company has two commercial partnerships and a contract with the government, which accounted for 100% of the Company's commercial partnership and government contract revenues and 98%, 100% and 95% of total revenues for the years ended December 31, 2002, 2001 and 2000, respectively. Of the total accounts receivable balance at December 2002 and 2001, 83% and 73%, respectively, is comprised of receivables from one of the commercial partnerships.

Comprehensive Income (Loss)

SFAS No. 130, "Reporting Comprehensive Income" established standards for reporting and display of comprehensive income and its components in the financial statements. Comprehensive income, as defined, includes all changes in equity during a period from non-owner sources. The Company's other comprehensive income as of December 31, 2002, 2001 and 2000 totaled $207,560, $55,756 and $42,677, respectively, and consisted entirely of unrealized gains on investments in marketable securities.

Net Income (Loss) Per Common Share

The Company computes net income (loss) per common share in accordance with Statement of Financial Accounting Standards No. 128, "Earnings Per Share," ("SFAS No. 128"). Under the provisions of SFAS No. 128, basic net income (loss) per common share ("Basic EPS") is computed by dividing net income (loss) attributable to common stockholders by the weighted average number of common shares outstanding. Diluted net income (loss) per common share ("Diluted EPS") is computed by dividing net income (loss) attributable to common stockholders by the weighted average number of common shares and dilutive potential common share equivalents then outstanding. Potential common shares consist of shares issuable upon the exercise of stock options and warrants. The calculation of the net loss per share for the years ended December 31, 2002, 2001 and 2000 does not include 449,453, 1,097,095 and 1,979,485 potential shares of common share equivalents, respectively, as their impact would be antidilutive.

Segment Reporting

Statement of Financial Accounting Standards No. 131, "Disclosures About Segments of an Enterprise and Related Information," ("SFAS No. 131") requires companies to report information about operating segments in interim and annual financial statements. It also requires segment disclosures about products and services, geographic areas and major customers. The Company has determined that it operates in only one segment during the three year period end December 31, 2002.

Internal Use Software

Statement of Position No. 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use," ("SOP No. 98-1") provides guidance regarding when software developed or obtained for internal use should be capitalized. The predominant portion of the software applications used by the Company were purchased from third parties. The Company expenses the cost of accumulating and preparing data for use in its database applications as such costs are incurred.

Recent Accounting Pronouncements

In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 143, "Accounting for Asset Retirement Obligations" ("SFAS No. 143"). SFAS No. 143 requires recording the fair value of a liability for an asset retirement obligation in the period in which it is incurred, and a corresponding increase in the carrying value of the related long-lived asset. Over time, the liability is accreted using the original discount rate when the liability was initially recognized, and the capitalized cost is depreciated over the useful life of the related asset. Upon settlement of the liability, it is either settled for its recorded amount or a gain or loss upon settlement is recorded. The provisions of SFAS No. 143 will be effective for fiscal years beginning after June 15, 2002. The adoption of SFAS No. 143 is not expected to have any impact on the Company's financial statements or results of operations.

In June 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 146, "Accounting for Costs Associated with Exit or Disposal Activities" ("SFAS No. 146"). SFAS No. 146 nullifies Emerging Issues Task Force Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)" ("EITF No. 94-3"). SFAS No. 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred. This is in contrast to EITF 94-3 that required recognition of a liability upon an entity's commitment to an exit plan. SFAS No. 146 concludes that a commitment, by itself, does not create a present obligation meeting the definition of a liability. This statement establishes fair value as the objective for initial measurement of the liability. The provisions of SFAS No. 146 are effective for exit or disposal activities that are initiated after December 31, 2002. The adoption of SFAS No. 146 is not expected to have any impact on the Company's financial statements or results of operations.

In November 2002, the Financial Accounting Standards Board issued Financial Accounting Series FASB Interpretation No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others—an interpretation of FASB Statements No. 5, 57, and 107 and rescission of FASB Interpretation No. 34" ("FIN No. 45"). FIN No. 45 elaborates on the disclosures to be made by a guarantor in its interim and annual financial statements regarding its obligations under certain guarantees that it has issued. It also clarifies that a guarantor is required to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. The initial recognition and initial measurement provisions of FIN No. 45 are applicable on a prospective basis to guarantees issued or modified after December 31, 2002, irrespective of the guarantor's fiscal year-end. The disclosure requirements are effective for financial statements of interim or annual periods ending after December 15, 2002. The interpretive guidance incorporated without change from Interpretation 34 continues to be required for financial statements for fiscal years ending after June 15, 1981—the effective date of Interpretation 34. The adoption of FIN No. 45 is not expected to have any impact on the Company's financial statements or results of operations.

In December 2002, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 148, "Accounting for Stock-Based Compensation—Transition and Disclosure—an amendment of FASB Statement No. 123" ("SFAS No. 148") which amends FASB Statement No. 123, "Accounting for Stock-Based Compensation," to provide alternative methods of transition for an entity that voluntarily changes to the fair value based method of accounting for stock-based employee compensation. It also amends the disclosure provisions of that Statement to require prominent disclosure about the effects on reported net income of an entity's accounting policy decisions with respect to stock-based employee compensation. SFAS No. 148 amends Accounting Principles Board Opinion No. 28, "Interim Financial Reporting," to require prominent disclosure in interim financial information. The provisions of SFAS No. 148 are effective for financial statements for fiscal years ending after December 15, 2002 with the interim reporting provisions effective for reporting periods beginning after December 15, 2002. The adoption of SFAS No. 148 did not have any material impact on the

Company's financial statements or results of operations. The required disclosures for the year ended December 31, 2002 are presented in Note 2.

3. Investments

The following is a summary of short-term available-for-sale marketable securities at December 31, 2002 and 2001. Expected maturities will differ from contractual maturities because the issuers of the securities may have the right to repay obligations without prepayment penalties.

	2002			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Corporate debt securities	$5,014,926	$10,244	—	$5,025,170

	2001			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Corporate debt securities	$4,541,487	$42,513	—	$4,584,000

The following is a summary of long-term available-for-sale marketable securities at December 31, 2002 and 2001. All long-term available-for-sale marketable securities have maturities of between one and five years. The Company's intent is to hold these securities for greater than one year. Expected maturities will differ from contractual maturities because the issuers of the securities may have the right to repay obligations without prepayment penalties.

	2002			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Govt. and agency obligations	$ 7,106,085	$123,555	—	$ 7,229,640
Corporate debt securities	3,019,689	73,761	—	3,093,450
Total current available-for-sale securities	$10,125,774	$197,316	—	$10,323,090

	2001			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Govt. and agency obligations	$15,309,578	$ —	$91,770	$15,217,808
Corporate debt securities	16,933,229	105,013	—	17,038,242
Total current available-for-sale securities	$32,242,807	$105,013	$91,770	$32,256,050

4. Discontinued Operations

On December 20, 2001, the Company acquired all of the assets of Celera's AgGen plant genomics and genotyping business. The aggregate purchase price was $2,621,607 which consists of 422,459 of the Company's common stock and certain expenses. The Company allocated $265,214 to equipment, $871,607 to intangible assets and $1,484,786 to goodwill. After the closing, the AgGen genomics and genotyping business became a new business unit of the Company called ParaGen.

In November 2002, the Company decided to close the operations of ParaGen. At December 31, 2002 all of the goodwill and associated assets were written down to their fair value less cost to sell and reported in the loss from discontinued operations as a result the Company recognized an impairment loss of $1,484,786 in 2002 (see Note 5). In February 2003 the ParaGen business assets were sold to DNA Landmarks for $300,000 and potential future royalties between 10% and 15%, over the next three years, of revenues from certain identified customers.

In October 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standard No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" ("SFAS No. 144"). SFAS No. 144 supersedes FASB Statement No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed of" ("SFAS No. 121") and Accounting Principles Board Opinion No. 30, "Reporting the Results of Operations—Reporting the Effects of Disposal of a Segment of Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions" ("APB No. 30"). SFAS No. 144, while retaining the fundamental recognition and measurement provision of SFAS No. 121, establishes a "primary-asset" approach to determining the cash flow estimation period for a group of assets and liabilities. Similarly, SFAS No. 144 retains the basic provisions of APB No. 30, but broadens the presentation to include a component of an entity. In addition, discontinued operations are no longer measured on a net realizable value basis and future operating losses are no longer recognized before they occur. Rather, discontinued operations are carried at the lower of carrying amount or fair value less cost to sell. Application of the provisions of SFAS No. 144 is required for fiscal years beginning after December 15, 2001. As a result of the adoption of SFAS No. 144, the Company's closing of Paragen's operations was treated as discontinued operations.

5. Goodwill and Intangible Assets

Effective January 1, 2002, the Company adopted Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets," ("SFAS 142"). This statement addresses accounting and reporting for acquired goodwill and intangible assets. In accordance with the requirements of this statement goodwill is no longer amortized. Accordingly, during the year ended December 31, 2002, the Company did not record any goodwill amortization. In conjunction with the adoption of SFAS 142, the Company completed the required transitional impairment test as of January 1, 2002 and no goodwill impairment was deemed necessary.

Other intangible assets are comprised of the following:

	December 31, 2002		December 31, 2001	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Revenue backlog	$—	$—	$150,000	$—
Customer base	—	—	200,000	—
Total	$—	$—	$350,000	$—

	Aggregate Expenses for the Year Ended	
	December 31, 2002	December 31, 2001
Revenue backlog	$150,000	$—
Customer base	100,000	—
Total	$250,000	$—

Following is a schedule of the goodwill account activity:

	Total
Balance at December 31, 2001	$1,484,786
Goodwill acquired	—
Amortization	—
Impairment losses	1,484,786
Balance at December 31, 2002	$ —

During the years ended December 31, 2001 and 2000, the Company did not record any goodwill amortization.

6. Property and Equipment

Property and equipment consists of the following:

	Useful Lives	December 31, 2002	December 31, 2001
Buildings	10	$ 398,453	$ 398,453
Leasehold improvements	7	9,784,629	10,123,217
Furniture and laboratory equipment	7	17,471,251	18,758,039
Computer equipment	4	8,046,165	8,238,686
Assets held for sale		300,000	—
Total costs		35,814,470	37,518,395
Less accumulated depreciation		(13,569,205)	(9,664,327)
Property and equipment, net		$ 22,431,290	$27,854,068

Depreciation and amortization expense for the years ended December 31, 2002, 2001, and 2000 was $5,807,178, $4,642,424, and $3,133,785 respectively.

The Company leases certain equipment under capital lease agreements. The cost of equipment under capital leases at December 31, 2002 and 2001, was $788,889 and $1,256,014, respectively. The accumulated amortization for equipment under capital leases was $327,839 and $466,025 at December 31, 2002 and 2001, respectively.

7. Fair Value of Financial Instruments

The carrying value of cash and cash equivalents, accounts payable and accounts receivable at December 31, 2002 and 2001 approximated their fair value due to the short-term nature of these items.

The fair value of the Company's short-term and long-term investments at December 31, 2002 and 2001 was determined based on quoted financial market prices. At December 31, 2002, 2001 and 2000, the Company had $207,560, $55,756 and $42,677 in unrealized gains on investments, respectively.

The historical carrying value of the Company's capital lease obligations and long-term debt approximated their fair value because the interest rates on these obligations approximate rates currently available to the Company.

8. Accrued Liabilities

Accrued liabilities consist of the following:

	December 31, 2002	December 31, 2001
Payroll	$1,122,762	$ 497,007
Vacation accrual	311,668	396,452
Professional services	198,357	275,049
Licenses	10,465	—
Other	69,778	164,764
	$1,713,031	$1,333,272

9. Income Taxes

No provision for federal or state income taxes has been recorded as the Company has incurred net operating losses since inception.

Significant components of the Company's deferred tax assets and liabilities at December 31, 2002 and 2001 consist of the following:

	2002	2001
Deferred tax assets:		
Domestic net operating loss carryforwards	$ 23,098,645	$ 13,654,522
Deferred revenue	4,461,025	5,155,697
Stock-based compensation	1,291,410	1,037,440
Compensation accruals	430,379	153,099
Other	10,714	36,045
Total deferred tax assets	29,292,173	20,036,803
Valuation allowance for deferred tax assets	(27,701,212)	(18,803,822)
Deferred tax assets, net	1,590,961	1,232,981
Deferred tax liabilities:		
Property and equipment	1,590,961	1,232,981
Total deferred tax liabilities	1,590,961	1,232,981
Net deferred tax asset (liability)	$ —	$ —

At December 31, 2002, the Company provided a full valuation allowance against its net deferred tax assets since realization of these benefits could not be reasonably assured. The increase in valuation allowance resulted primarily from the additional net operating loss carryforward generated.

As of December 31, 2002, the Company had federal and state net operating loss carryforwards of $59,912,000. These net operating loss carryforwards begin to expire in 2012. The utilization of the federal net operating loss carryforwards is subject to limitation under the rules regarding a change in stock ownership as determined by the Internal Revenue Code. The annual limitation on utilization of net operating losses generated prior to the change in stock ownership is $1,569,000 per year. Since this annual limitation exceeds the amount of

loss generated prior to the ownership change, no net operating losses will be lost as a result of the application of the annual limitation.

Taxes computed at the statutory federal income tax rate of 34% are reconciled to the provision for income taxes as follows:

	2002	2001	2000
Effective Rate	0%	0%	0%
United States federal tax at statutory rate	$(7,979,938)	$(5,542,557)	$(5,925,733)
State taxes (net of federal benefit)	(1,022,621)	(752,048)	(777,974)
Change in valuation allowance	8,897,390	6,286,601	6,685,894
Other nondeductible expenses	105,169	8,004	17,813
Provision for income taxes	$ —	$ —	$ —

10. Long-Term Debt

The Company's long-term debt at December 31, 2002 and 2001 consists of the following:

	2002	2001
Senior note payable	—	$ 2,000,000
Notes payable for equipment financing	$ 7,299,692	12,062,165
Total notes payable	7,299,692	14,062,165
Less current maturities	(4,093,196)	(6,762,473)
Long-term portion	$ 3,206,496	$ 7,299,692

The equipment financing consists of several notes payable to two financial institutions for the financing of equipment purchases made prior to December 31, 2001. The payment amount varies from (1) approximately 1% of the outstanding balance for the first twelve months and then increases to 3% of the outstanding balance for the remaining 36 months with a balloon payment of the remaining balance on the notes due at the maturity date or (2) approximately 2.5% of original principal for a period of 48 months. The stated interest rate ranges from 11.3% to 14.2%. The notes are collateralized by the equipment pledged by the Company.

During July 1999, the Company entered into a $2.0 million senior debt agreement with a financial institution. The note had interest-only payments until March 1, 2002, at a rate of 13.49%, followed by six equal monthly principal and interest payments. The loan was collateralized by the Company's equipment, intellectual property and receivables. In connection with the debt, Paradigm issued the financial institution 116,279 warrants to purchase the Company's common stock at an exercise price of $2.15 per share. The Company did not record any debt discount related to these warrants as their fair value as determined by the Black-Scholes valuation method was *de minimus*. This loan agreement prohibited the payment of any cash dividends until the Company has fully repaid the loan. During 2002 the loan was fully repaid.

Annual maturities of the long-term debt for the years subsequent to December 31, 2002 are as follows:

2003	$4,093,196
2004	2,802,220
2005	404,276
Total	$7,299,692

11. Commercial Partnerships and Contracts

In September 1998, Paradigm entered into a three-year commercial partnership with Bayer for the development of new herbicides. In June 2001, Bayer extended the terms of this agreement for an additional three years, ending in September 2004. Bayer also has the option to extend the agreement for two additional years, through September 2006. Under the terms of the partnership, Paradigm will receive up to $45.7 million, including milestone payments. Paradigm will also receive success fees for any products commercialized under this agreement. The Company has recognized $29.4 million in cumulative revenues from the commercial partnership through December 31, 2002. In addition, the Company is entitled to receive a royalty on the annual net sales of any herbicides developed by Bayer for a defined period of time.

In November 1999, Paradigm entered into a commercial partnership with Monsanto, commencing in February 2000 and continuing through January 2006, for the development of crop products and nutrition products. If the commercial partnership continues for the six year research term, the Company will receive $41.5 million in quarterly and up-front payments. In addition, the Company may receive as much as an additional $13.5 million in performance fees and milestone payments. The Company has recognized $23.5 million in cumulative revenues from the commercial partnership through December 31, 2002. During November 2002 the research plan under the commercial partnership was revised. The revision to the research plan slowed the timing of revenue recognition during the fourth quarter 2002, but will not alter the amount of revenue the Company will recognize from the commercial partnership.

In February 2002, Paradigm entered into a commercial partnership with VDDI Pharmaceuticals, for the development of antibiotics for the treatment of gram-positive bacterial infections. Under the agreement, the Company used its proprietary metabolic profiling platform to prioritize lead compounds targeting the essential bacterial enzyme nicotinamide adenine dinucleotide synthetase for further preclinical development. VDDI Pharmaceuticals began contributing to revenues in the third quarter of 2002 and ended in December 2002 when the agreement ended. The Company has recognized $1.0 million in revenues from the commercial partnership through December 31, 2002.

In September 2002, Paradigm entered into a contract with NIEHS, for the determination of how toxicants work and cause damage at the cellular level. The Company will receive up to $23.8 million in contracted payments over the five year contract. The Company has recognized $63,000 in revenues from the commercial partnership through December 31, 2002.

12. Stockholders' Equity

During 2002 the Company had no significant equity transactions.

On December 20, 2001, the Company completed a strategic alliance with Celera Genomics, an Applera Corporation business. Under the terms of the arrangement the Company, acquired Celera's AgGen plant genomics and genotyping business for 422,459 shares of common stock.

On October 23, 2001, the Company closed a direct offering in which it sold 5,097,727 shares of common stock at a price of $5.50 per share for net proceeds of approximately $26.1 million, net of underwriting discounts, commissions and other offering costs.

During the first quarter of 2001, certain warrant holders exercised 460,000 warrants. The Company issued 359,426 shares of common stock related to the cashless exercise of these warrants.

On May 10, 2000, the Company completed an initial public offering in which it sold 6,000,000 shares of common stock at a price of $7.00 per share for net proceeds of approximately $37.6 million, net of underwriting discounts, commissions and other offering costs. Upon the closing of the offering, all the Company's convertible preferred stock converted into 13,353,198 shares of common stock. After the offering, the Company's authorized capital consisted of 50,000,000 shares of common stock, $0.01 par value per share, and 5,000,000 shares of preferred stock, $0.01 par value per share. On May 31, 2000, the underwriters exercised an over-allotment option to purchase an additional 750,000 shares resulting in net proceeds of approximately $4.9 million.

In January 2000, the Company sold 3,000,000 shares of Series C Preferred Stock to a group of investors for gross proceeds of $15,000,000 or $5.00 per share. The Series C Preferred Stock automatically converted into shares of the Company's common stock, upon the closing of the initial public offering, at a one-to-one conversion ratio. The Company has recorded a beneficial conversion charge of $12,000,000 to reflect the difference between the estimated fair value of the Company's Series C Preferred Stock of $9.00 per share and the $5.00 per share sales price of these shares.

13. Stock Options and Warrants

In July 2002, the Company started issuing options under the 2002 Non-Qualified Stock Option Plan (the "2002 Plan"), which provided for the grant of up to 400,000 employee non-qualified stock options. Stock options granted under the 2002 Plan are to have exercise periods not to exceed ten years. Options granted under the 2002 Plan generally vest over a period of four years from the date of grant. Option grants to new employees are generally made within 90 days of commencement of service with the Company and vest over a period of four years retroactively to the date of hire.

In March 2000, the Company started issuing options under the 2000 Stock Option Plan (the "Plan"), which provided for the grant of up to 1,800,000 employee stock options. In May 2002, shareholders voted to increase the number of options that could be granted under the Plan to 3,000,000 shares. Stock options granted under the Plan are to have exercise periods not to exceed ten years. Options granted under the Plan generally vest over a period of four years from the date of grant. Option grants to new employees are generally made within 90 days of commencement of service with the Company and vest over a period of four years retroactively to the date of hire.

In February 1998, the Company adopted the 1998 Stock Option Plan (the "1998 Plan"), which provided for the grant of up to 1,765,000 employee stock options. In March 1999, the 1998 Plan was amended to provide for the grant of up to 2,515,000 employee stock options. The board amended the 1998 Plan in November 1999 to increase the options available for grant to 3,715,000. In December 1999, the board authorized an additional 300,000 options for the 1998 Plan. Stock options granted under the 1998 Plan are to have exercise periods not to exceed ten years. Options granted under the 1998 Plan generally vest over a period of four years from the date of grant. Option grants to new employees are generally made within 90 days of commencement of service with the Company and vest over a period of four years retroactively to the date of hire. The 1998 Plan provides the right to exercise options before they are vested into shares of common stock subject to a repurchase right by the Company.

The Board of Directors has reserved shares of the Company's common stock for issuance under the Employee Stock Purchase Plan (the "ESPP"). As of December 31, 2002, there were 309,406 shares of common stock available for issuance. The ESPP has two six-month offering periods (each an "Offering Period") annually, beginning on December 1 and June 1, respectively. At the end of an Offering Period, the total payroll deductions by an eligible employee for that Offering Period will be used to purchase common stock of the Company at a price equal to 85% of the lesser of (a) the reported closing price of the Company's common stock for the first day

of the Offering Period, or (b) the reported closing price of the common stock for the last day of the Offering Period.

During 2002, 2001 and 2000, $32,136, $229,008 and $607,251, respectively, had been contributed to the ESPP and 46,505, 42,030 and 102,059 shares, respectively, were issued.

A summary of the status of the 2002 Plan, the Plan and the 1998 Plan at December 31, 2002, and changes during the years ended December 31, 2002, 2001 and 2000 are presented below:

	Shares Underlying Options	Weighted Average Exercise Price
Outstanding at December 31, 1999	1,473,786	$0.28
Granted	722,302	7.66
Forfeited	(354,145)	2.01
Exercised	(434,593)	0.41
Outstanding at December 31, 2000	1,407,350	$3.58
Granted	1,283,133	4.41
Forfeited	(286,149)	6.37
Exercised	(249,949)	0.89
Outstanding at December 31, 2001	2,154,385	$4.02
Granted	1,942,454	1.40
Forfeited	(827,165)	4.44
Exercised	(222,305)	0.66
Outstanding at December 31, 2002	3,047,369	$2.37

The weighted average grant date fair value was $1.04 per share, $3.80 per share and $10.30 per share for the years ended December 31, 2002, 2001 and 2000, respectively. During the years ended December 31, 2002, 2001 and 2000, the Company repurchased 165,405, 92,068 and 7,442 shares, respectively, of restricted stock which were subject to repurchase rights. At December 31, 2002, 2001 and 2000, the Company had 12,950, 307,649 and 848,114 shares of common stock outstanding which were subject to the Company's lapsing right of repurchase in the event the holder's association with the Company terminates. These shares are the result of the exercise of unvested stock options by employees. The shares which relate to the exercise of unvested stock options generally vest over the four year vesting period of the underlying exercised stock options.

During 2000 and 1999, the Company issued stock options to certain employees with exercise prices below the fair value of its common stock at the date of grant. In accordance with the requirements of APB No. 25, the Company has recorded deferred compensation and additional paid-in capital for the difference between the exercise price of the stock options and the fair value of the Company's common stock at the date of grant. This deferred compensation is amortized to stock-based compensation expense over the period during which the options or restricted common stock, subject to repurchase, vest using the straight-line method, which is generally four years. The Company recognized $0, $0 and $1,279,976 of deferred compensation in 2002, 2001 and 2000, respectively. The Company recognized $597,039, $1,002,818 and $1,294,334 in compensation expense during the years ended December 31, 2002, 2001 and 2000, respectively, related to the amortization of deferred compensation. The Company reversed $582,289 and $564,053 of deferred compensation related to the forfeiture of unvested options during the years ended December 31, 2002 and 2001, respectively.

In addition, in February 2000, the Company granted 12,000 options with an exercise price of $5.00 per share to members of its Scientific Advisory Board. The Company recorded a charge of approximately $72,000 at the

date of the grant, which represents the fair value of these options determined through use of the Black-Scholes model.

The following table summarizes information about the Company's stock options at December 31, 2002:

Options Outstanding				Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Contracted Life	Weighted Average Exercise Price	Exercisable As of 12/31/2002	Weighted Average Exercise Price
$ 0.00—$ 2.39	2,031,466	5.7	$ 1.09	619,562	$ 0.6557
2.40— 4.78	507,722	3.6	3.99	314,637	$ 3.9569
4.79— 7.16	437,878	4.8	5.63	311,258	$ 5.5869
7.17— 9.55	34,341	4.4	7.76	14,021	$ 7.8636
9.56— 11.94	18,751	4.4	9.97	16,289	$ 9.9830
11.95— 14.33	12,274	4.9	12.73	3,755	$12.9042
14.34— 16.72	1,825	4.6	15.40	988	$15.3679
16.73— 19.10	2,487	4.6	17.44	1,373	$17.4612
19.11— 21.49	160	4.7	19.38	80	$19.3800
21.50— 23.88	465	4.7	23.25	232	$23.2500
0.00— 23.88	3,047,369	5.2	2.37	1,282,195	$ 2.93

In January 2000, in connection with an amendment of the July 1999 operating lease agreement for a new facility, the Company issued 60,000 warrants to purchase the Company's common stock with an exercise price of $5.00 per share. These warrants have an exercise period of 10 years. The fair value of these warrants at the date of grant was determined using the Black-Scholes option-pricing model to be $361,138. This amount has been deferred and is being recognized as an increase to rent expense over the term of the related lease.

In July 1999, the Company entered into a senior debt agreement. In connection with the agreement the Company issued 116,279 warrants to purchase the Company's common stock with an exercise price of $2.15 per share, which will expire in July 2009. Also in July 1999, the Company entered into an operating lease agreement for a new facility being constructed. In connection with the agreement, the Company issued 150,000 warrants to purchase the Company's common stock with an exercise price of $3.00 per share, which will expire in July 2009. The fair value of both the 116,279 and 150,000 warrants, as determined using the Black-Scholes model in accordance with SFAS No. 123, was *de minimus*.

The activity for stock warrants is presented in the following table:

	Year Ended December 31,					
	2002		2001		2000	
	Shares Underlying Warrants	Weighted Average Exercise Price Per Share	Shares Underlying Warrants	Weighted Average Exercise Price Per Share	Shares Underlying Warrants	Weighted Average Exercise Price Per Share
Outstanding at beginning of year	303,779	$0.76	763,779	$1.77	703,779	$1.49
Issued	—	—	—	—	60,000	5.00
Exercised	—	—	460,000	0.48	—	—
Outstanding at end of year	303,779	0.76	303,779	0.76	763,779	1.77
Exercisable at end of year	303,779	$0.76	303,779	$0.76	763,779	$1.77

14. Commitments

The Company leases software under a noncancellable capital lease and leases office space and certain equipment under operating leases. Future minimum lease payments required under the leases at December 31, 2002 are as follows:

	Capital Leases	Operating Leases
2003	$ 240,000	$ 1,840,176
2004	180,000	1,915,884
2005	—	1,937,323
2006	—	1,883,934
2007	—	1,947,255
Thereafter	—	6,001,115
Total minimum lease payments	420,000	$15,525,687
Less: amount representing interest	(41,393)	
Present value of net minimum lease payments	378,607	
Less: current portion	(206,978)	
Long-term portion capital lease obligations	$ 171,629	

Rent expense under operating leases totaled $2,351,860, $2,517,027 and $1,242,994 for the years ended December 31, 2002, 2001 and 2000, respectively.

In March 1998, the Company entered into an agreement with a consultant to identify commercial partnership opportunities for the Company. The consultant receives a monthly fee for its services plus a success fee based on the amount of funding received by the Company under commercial partnerships entered into during the term of this consulting agreement. This consulting agreement can be cancelled sixty days after written notification. Based on the amount of funds received by the Company from its commercial partnerships through December 31, 2002, the Company has paid this consultant success fees of approximately $631,256. If the Company receives the maximum amount of funding under its existing commercial partnerships, approximately an additional $1.5 million in success fees will be required to be paid to this consultant.

15. 401(K) Plan

The Company provides a 401(k) Retirement Savings Plan to its employees. The Company matches 25% of an employee's savings up to 6% of pay, and these contributions vest ratably over a four-year period. Company matching contributions for all employees for the years ended December 31, 2002, 2001 and 2000 were $147,422, $137,781 and $93,324, respectively.

16. Quarterly Financial Data (Unaudited):

	2002				
	First	Second	Third	Fourth	Total
	(in thousands, except per share amounts)				
Revenues	$ 5,643	$ 4,414	$ 5,210	$ 1,916	$ 17,183
Loss operations	(4,935)	(5,181)	(3,388)	(6,608)	(20,112)
Loss from continuing operations	(4,991)	(5,262)	(3,466)	(6,577)	(20,297)
(Loss) income from discontinued operations	(227)	254	(467)	(2,735)	(3,174)
Net loss attributable to common stockholders	(5,217)	(5,008)	(3,933)	(9,312)	(23,470)
Net loss per share attributable to common stockholders—basic and diluted	$ (0.16)	$ (0.16)	$ (0.12)	$ (0.29)	$ (0.73)

	2001				
	First	Second	Third	Fourth	Total
	(in thousands, except per share amounts)				
Revenues	$ 5,451	$ 6,058	$ 6,251	$ 6,707	$ 24,467
Loss operations	(4,164)	(4,304)	(3,926)	(3,550)	(15,944)
Loss from continuing operations	(4,010)	(4,298)	(4,057)	(3,618)	(15,983)
(Loss) income from discontinued operations				(65)	(65)
Net loss attributable to common stockholders	(4,010)	(4,298)	(4,057)	(3,683)	(16,048)
Net loss per share attributable to common stockholders—basic and diluted	$ (0.15)	$ (0.16)	$ (0.15)	$ (0.12)	$ (0.59)

EXHIBIT INDEX

Exhibit Number	Description
10.35#	Amendment to the Monsanto/Paradigm Genetics Collaboration Agreement, dated September 23, 2002
10.36#	National Institute of Environmental Health Sciences contract with the Registrant.
10.37†	General Claims Release between the Registrant and Ian Howes
10.38†	Separation Agreement and General Claims Release between the Registrant and Athanasios Maroglou, dated March 02, 2002.
10.39†	Agreement related to Separation and Severance between the Registrant and John A. Ryals, Ph.D., dated May 16, 2002.
10.40†	Separation Agreement and General Claims Release between the Registrant and Gary Miller, dated August 09, 2002.
10.41†	Employment Agreement between the Registrant and Heinrich Gugger, dated July 10, 2002,
10.42†	Employment Agreement between the Registrant and Philip R. Alfano, dated November 22, 2002.
10.43†	Employment Agreement between the Registrant and Thomas Colatsky, dated August 05, 2002.
10.44†	Employment Agreement between the Registrant and J. Barry Buzogany, dated November 18, 2002.
10.45†	Agreement Related to Severance between the Registrant and James D. Bucci, dated May 01, 2002.
10.46†	Agreement Related to Severance between the Registrant and Keith R. Davis, dated November 22, 2002.
10.47†	Agreement Related to Severance between the Registrant and John E. Hamer, dated November 22, 2002.
10.48†	2003 Employee, Director and Consultant Stock Plan
23.1	Consent of PricewaterhouseCoopers LLP
99.1	Certification pursuant to Section 906 of Sarbanes-Oxley Act of 2002.
99.2	Certification of President and Chief Executive Officer pursuant to Section 302 of Sarbanes-Oxley Act of 2002.
99.3	Certification of Vice President, Finance, Chief Accounting Officer and Treasurer pursuant to Section 302 of Sarbanes-Oxley Act of 2002.

† Management contract or compensatory plan or arrangement filed in response to Item 15(a)(3) of the instructions to Form 10-K.

Confidential treatment requested from the Securities and Exchange Commission. The portions of the document for which confidential treatment has been granted are marked "Confidential" and such confidential portions have been filed separately with the Securities and Exchange Commission.

Paradigm Genetics, Inc. Shareholder Information

Board of Directors

G. Steven Burrill
Chairman of the Board
Paradigm Genetics, Inc.
Chief Executive Officer
Burrill & Company
Director since 1999

Robert M. Goodman, Ph.D.
Professor
University of Wisconsin—Madison
Director since 1998

Heinrich Gugger, Ph.D.
President and CEO
Paradigm Genetics, Inc.
Director since 2002

Susan K. Harlander, Ph.D.
President
BIOrational Consultants, Inc.
Director since 2001

Leroy E. Hood, M.D., Ph.D.
President and Director
Institute for Systems Biology
Director since 2002

Mark B. Skaletsky
Chairman and Chief Executive Officer
Essential Therapeutics, Inc.
Director since 2001

Michael Summers
Chief Executive Officer
Floranova Limited
Director since 1998

Henri Zinsli, Ph.D.
Chairman
Discovery Partners International AG
Director since 1998

Executives

Heinrich Gugger, Ph.D.
President and CEO

Philip R. Alfano
Vice President, Finance,
Chief Financial Officer and Treasurer

James D. Bucci
Vice President, Human Resources

J. Barry Buzogany, Esq.
Vice President, General Counsel and Corporate Secretary

Thomas J. Colatsky, Ph.D.
Vice President, Healthcare Research

Keith Davis, Ph.D.
Vice President, Agricultural Research

John E. Hamer, Ph.D.
Chief Scientific Officer and
Vice President, Business Development

Corporate Offices

Paradigm Genetics, Inc.
108 Alexander Drive
PO Box 14528
Research Triangle Park, NC 27709
Tel: 919.425.3000
Fax: 919.425.2915
Email: IR@paradigmgenetics.com
www.paradigmgenetics.com

Shareholder Services

Shareholder Relations Department
American Stock Transfer & Trust Co.
59 Maiden Lane
New York, NY 10038
Tel: 800.937.5449
www.amstock.com

Stock Exchange Listing

The common stock of Paradigm Genetics is traded on the Nasdaq National Market and has been quoted under the symbol "PDGM" since May 5, 2000. As of February 28, 2003, there were approximately 4,650 beneficial and shareholders of record.

Stock Price History

2002	High	Low
Q1	5.40	1.60
Q2	1.85	1.21
Q3	1.41	0.45
Q4	0.82	0.29

Annual Meeting

The annual meeting of shareholders will be held on Friday, May 9, 2003, at 10 a.m. at Paradigm Genetics, Inc. 108 Alexander Drive, Building 1-A, Research Triangle Park, NC. For directions, visit www.paradigmgenetics/aboutus/contact.html

Independent Accountants

PricewaterhouseCoopers LLP
Raleigh, NC