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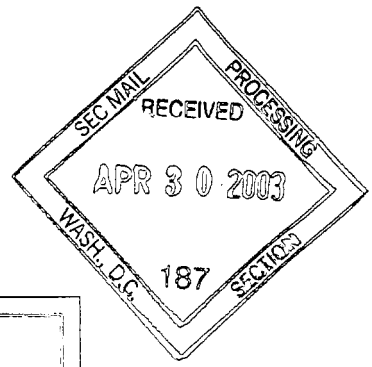

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LARGE SCALE BIOLOGY™

Large Scale Biology Corporation
2002 Annual Report

To our Shareholders:

The experience of Large Scale Biology Corporation in 2002 calls to mind the words of Dickens: "It was the best of times, it was the worst of times." The past year will be remembered for the stock market devaluation of the biotech sector, from which LSBC was no exception. Yet, we take pride in LSBC's commercially promising scientific achievements during the year and the agreements we executed that are expected to further our commercial opportunities. We are proud of the hard work, fiscal discipline and focus of our scientists, staff and business development team who have responded to the challenges of this period. Each employee of LSBC is focused on maximizing near-term business opportunities for the benefit of our Shareholders.

LSBC's Board formed a special committee composed of outside Directors to reassess the Company's strategies for commercializing technologies and building revenues to restore Shareholder value. Engaging expert consultants to assist in its evaluations, the special committee conducted a vigorous and thorough review of all the Company's core technologies and business strategies. The study confirmed the soundness of corporate scientific initiatives and resulted in several constructive recommendations for tightening the focus of our revenue initiatives for building and sustaining the Company.

On April 14, 2003, Kevin J. Ryan was appointed President and Chief Executive Officer. He succeeds me in the CEO post which I have resigned, but I remain Chairman of the Board and actively involved as head of the Company's Scientific Advisory Board. In the presidency, Mr. Ryan replaces John D. Fowler, Jr. who resigned that post and remains a Director on the LSBC Board through the current term.

Mr. Ryan, a member of the LSBC Board, served as our Company's President from 1991 until 1995 when he became CEO of Wesley Jessen Corporation and led the successful turnaround of that specialty contact lens manufacturer.

LSBC's Senior Vice President and Chief Financial Officer, Ronald J. Artale, has assumed the additional responsibility of Chief Operating Officer. All operating areas now report to Mr. Artale.

With these management changes, your Directors consider the Company to be better positioned to improve the near term revenue-producing prospects of your Company's technologies and products.

With our stock trading at present levels, we will not suggest that we are certain of the future, but we truly believe in the significant commercial potential of our technologies.

In the past year, LSBC has made progress in our commercial product pipeline; new alliances and partnerships; scientific and technological achievements; and strengthening of management and financial disciplines.

Bearing in mind that LSBC is leading a global revolution in the development of plant-derived human biopharmaceuticals, we are pleased to report important advances in our commercial product pipeline:

- *alpha-Galactosidase A*: The FDA granted important orphan drug designation to LSBC's plant-derived human alpha-Galactosidase A enzyme for therapeutic treatment of Fabry disease, a genetically caused enzyme deficiency that results in death for those affected without a lifetime of therapeutic enzyme replacement. We are in the final stages of preparation to file our IND for alpha-Galactosidase A and expect to begin clinical trials later this year. LSBC believes our plant-derived drug will offer meaningful advantages over present therapies, thus increasing our confidence that we will form a financial and marketing partnership to bring our drug to market. Estimates of the overall market for alpha-Galactosidase A for Fabry disease exceed $1 billion annually.

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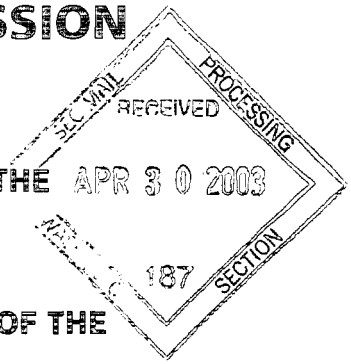
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549



FORM 10-K

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

For the year ended December 31, 2002

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

TRANSITION PERIOD FROM _____ TO _____.

Commission File Number 0-31275

LARGE SCALE BIOLOGY CORPORATION

(Exact name of registrant as specified in its charter)

Delaware	**77-0154648**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. employer identification number)**

3333 Vaca Valley Parkway, Vacaville, CA 95688
(Address of principal executive offices and zip code)

(707) 446-5501
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None
Securities registered pursuant to Section 12(g) of the Act:
Common Stock, $0.001 par value
Preferred Stock Purchase Rights

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

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

Indicate by check mark whether the Registrant is an accelerated filer (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the Registrant as of June 30, 2002 was approximately $36.4 million (based on the last reported sale price of $2.18 on June 28, 2002 on the NASDAQ National Market).

The number of shares outstanding of the Registrant's common stock as of March 20, 2003 was 25,257,891.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive proxy statement, which is expected to be filed not later than 120 days after the Registrant's year ended December 31, 2002, to be delivered in connection with the Registrant's 2003 Annual Meeting of Stockholders, are incorporated by reference into Part III of this Form 10-K.

Large Scale Biology Corporation
Form 10-K
For the Year Ended December 31, 2002
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Some of the statements contained in this report constitute forward-looking statements that involve substantial risks and uncertainties. In some cases, you can identify these statements by forward-looking words such as "may," "will," "expect," "plan," "anticipate," "believe," or "continue" and variations of these words or comparable words. In addition, any statements which refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements. Our Business section and Management's Discussion and Analysis of Financial Condition and Results of Operations contain many such forward-looking statements. These forward-looking statements involve known and unknown risks, uncertainties and situations that may cause our or our industry's actual results, level of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these statements. The risk factors contained in this report, under the heading Factors That May Affect Our Business, as well as any other cautionary language in this report, provide examples of risks, uncertainties and events that may cause our actual results to differ from the expectations described or implied in our forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. You should not place undue reliance on these forward-looking statements, which apply only as of the date of this report. Except as required by law, we do not undertake to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Large Scale Biology Corporation, LSBC, our logo, GENEWARE®, PLURIGEN, ProGEx and other product and trade names are trademarks of or registered trademarks of Large Scale Biology Corporation in the United States and/or other countries. Other product and trade names mentioned herein may be trademarks and/or registered trademarks of their respective companies. References in this report to "the Company," "our," "we" and "us" refer collectively to Large Scale Biology Corporation, a Delaware corporation, and its predecessors and subsidiaries.

PART I

Item 1. Business

Overview

LSBC's goal is to develop therapeutic products using our proprietary technologies and expertise. The product categories in which LSBC has made the most progress using our proprietary biomanufacturing technology are: (1) vaccines for the treatment of cancer and the treatment and prevention of infectious diseases, including disease agents of potential concern in biological warfare and, (2) the low-cost production of complex proteins for therapeutic product applications. Examples of specific products on which we are working include:

- a therapeutic vaccine for treatment of non-Hodgkin's lymphoma (NHL), our NHL vaccine;
- a proprietary form of human alpha-galactosidase A for the treatment of Fabry disease, a lysosomal storage disorder;
- a generic form of bovine aprotinin, a protease inhibitor used in cardiac surgery; and
- a series of prototype vaccines and prototype products for the expansion of bone marrow and cord blood stem cells.

We successfully completed a Phase I human clinical trial of our NHL vaccine and are designing a Phase III clinical trial and manufacturing protocol for this product to facilitate a potential collaboration for further development. We produced human alpha-galactosidase A as part of a collaborative research agreement with the National Institutes of Health, or NIH. We have received Orphan Drug designation for this potential product from the Food and Drug Administration (FDA), and we are preparing an IND, or Investigational New Drug Application. Using our proprietary proteomics and genomics technologies, LSBC has developed potential products and processes for treatment of a variety of diseases in the medical field of hematology based on our approach to the stimulation and expansion of stem cell precursors. We have initiated preclinical research on our approach for the expansion of bone marrow and cord blood stem cells.

LSBC's proprietary technologies include methodologies for the analysis of both genes and proteins and for the completion of that analysis in an automated, high-throughput fashion. We also own unique systems for manufacturing proteins in both research quantities and commercial quantities to pharmaceutical-grade purity standards. These systems use proprietary plant-based gene delivery vehicles in green plants for the production of vaccines and therapeutic proteins without genetic modifications of the plant host. We believe that these manufacturing technologies will provide us and our partners with significant competitive advantages in speed and ease of production, safety, production capacity and cost of goods in the future.

In addition to using our technologies to develop our own proprietary therapeutic product candidates, we are marketing them to collaborators and commercial customers. We believe opportunities exist to market our technologies to potential customers for the discovery of proteins that act as markers for diagnostic purposes and/or as therapeutic targets, and for custom manufacturing of client's protein therapeutics and vaccines.

LSBC was incorporated in California in 1987 and reincorporated in Delaware in 2000. From our inception until the end of 2000, LSBC's main focus was on internally developing and integrating proprietary technologies, and on providing research and development services to customers. In 2001, our focus shifted to the development of products throughout the early stages of clinical testing.

The Company is headquartered in Vacaville, California and its mailing address is 3333 Vaca Valley Parkway, Vacaville, California, 95688, and our telephone number is (707) 446-5501. Our corporate web site address is www.lsbc.com. We make available free of charge through our web site our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after filing such material electronically or otherwise furnishing it to the Securities and Exchange Commission

Developments in the Year 2002

LSBC accomplished the following during 2002:

- *Entered Into Several New Revenue-Generating Contracts*—Established new revenue sources including: our contract with The National Institute of Environmental Health Sciences to perform proteomics services, with potential revenues of $12.2 million over five years; our contract with the National Institute of Standards and Technology to develop a new vaccine discovery and production platform with potential revenues of $2 million over three years; and a worldwide license agreement that will allow Agilent Technologies to exclusively develop new technologies for the separation of low-abundance proteins from samples such as serum and plasma.

- *Filed for Orphan Drug Status on Fabry Disease Therapeutic*—Filed an Orphan Drug application with the FDA related to the Company's proprietary, plant-produced human enzyme, alpha-galactosidase A for use in enzyme replacement therapy for Fabry disease. Orphan Drug status was subsequently designated by the FDA. See "Recent Development" section.
- *Implemented Major Cost Reductions*—Reduced size of workforce by 25% in June 2002, prioritized our strategic focus and implemented other cost savings initiatives, altogether resulting in an annualized reduction in cash operating expenses of over $11 million beginning in the third quarter of 2002.
- *Entered Into New Collaborations With Potential Long-Term Rewards*
  - Established a collaboration with the Institute of Infectious Disease and Molecular Medicine at the University of Cape Town (South Africa) to develop and manufacture vaccines for Human Papillomavirus and AIDS. LSBC retains rights to the commercialization of possible products in North America and Europe, sharing rights elsewhere in the world outside Africa.
  - The Government of Ukraine signed a letter of intent with LSBC and another collaborative company to develop a national domestic capability of producing biopharmaceuticals in transgenic plants to address the long-term health requirements of Ukraine as well as neighboring countries.
- *Made Progress With Adult Stem Cell Growth Factor*—Further progress was made in this program and LSBC scientists reported a novel culture method utilizing human brain endothelial cells for which data in mice studies demonstrate a unique hematopoietic activity that increases the repopulating capacity of adult human bone marrow.
- *Further Established Our Intellectual Property*—In 2002 we obtained 53 new patents worldwide, impacting each key component of our technology base, bringing LSBC's total patents to 107. These new patents cover anti-cancer molecules, plant and animal viral vectors, proteomics processes and instruments, and biomanufacturing. LSBC also filed 149 new patent applications worldwide covering various aspects of the Company's technology base, which increases the total of pending patents to 251.
- *Made Progress With Our non-Hodgkin's Lymphoma Vaccine*—Progress was made in advancing the Company's NHL vaccine. Following formal presentation of positive safety data by LSBC scientists and Stanford University colleagues from Phase I clinical trials for the first plant-produced cancer vaccine, the Company began to design a possible Phase III trial for submission to the FDA. Promising results for the cancer vaccines have encouraged the Company to pursue further development of this vaccine once a contract is signed with a commercial partner.

Recent Development

In January 2003, the FDA granted the Company Orphan Drug designation for its proprietary plant-produced human enzyme, alpha-galactosidase A, for the treatment of Fabry disease. The Company is now accelerating its planned filing of an IND with the FDA for clinical trials of this product. LSBC has established a relationship with a clinical research center specializing in genetic diseases to undertake a Phase I clinical trial later this year.

Science and Industry Background

All living things are made up of one or more cells. Although science still has much to learn about how cells actually function, it is commonly accepted that all cells have several basic components. Inside each plant and animal cell is a nucleus containing deoxyribonucleic acid, or DNA, that makes up its genetic code. Different sections of the DNA are called genes. A gene or a combination of genes encode the information needed for carrying the various essential life functions. Each gene is composed of a specific, unique sequence of DNA. When a gene is turned on, or "expressed," the genetically coded information is copied into a related molecule called messenger ribonucleic acid, or mRNA. This messenger travels to a location outside the nucleus where proteins are then made according to the genetic information contained in the mRNA.

All diseases involve changes affecting one or more proteins in a cell. These changes may result in an increase, decrease or elimination of the relevant protein(s) or in the structure of the protein. Many diseases are directly caused by genetic defects that affect the way proteins are made or regulated within cells. In order to identify the nature of disease and to design effective drugs to treat diseases, it is necessary to understand these changes in the composition of the cellular proteins, or "proteome." Therefore, we believe that the field of proteomics is becoming crucial in the biotechnology and pharmaceutical industries' efforts to discover and develop drugs that treat disease, and to make products which enable researchers and doctors to predict, diagnose and monitor diseases. LSBC has developed over the past 15 years a comprehensive, proprietary proteomics technology that is capable of rapid analysis of the proteomes of normal and diseased human tissues for the identification of proteins that are associated with diseases. The study of these disease-related proteins is an important tool for diagnostic and therapeutic research and product development.

Private industry and the federal government have each announced the completion of the sequencing of the human genome. The Human Genome Project has resulted in large databases that contain genetic sequences of sections of the chromosomes but which provide little or no information about the function of these gene sequences. Scientists cannot infer, necessarily or reliably, gene function from gene sequence or mRNA levels alone, nor from comparison to other genes of known function. Without understanding the function of genes, the sequences are of little practical use. Determining gene function involves the discovery of the role or relationship that a gene, or the protein it encodes, has with a particular biological process and understanding the consequences of modulating its activity. Discovering gene function requires the matching of gene sequence to specific protein function. We believe our key technologies, including our core proteomics and GENEWARE technologies, address these needs. In addition, we believe that our manufacturing capability will enable us to produce commercially valuable proteins rapidly and cost effectively.

Much of the work being done in the biotechnology industry today is on drug development. Quite often, for a company to discover and develop a new drug requires analysis of "diseased" versus "normal" tissue to find what is known as a drug "target" within the tissue. A drug "target" may be a protein that is directly correlated to the disease or a biochemical pathway involved with the disease. The scientist's next step is to determine which chemicals, proteins or compounds impact the drug "target" in a positive way, i.e., provides a cure or reduces the effect of the disease on the particular tissue without causing unacceptable side effects. If such research is successful at that stage, then a potential drug product has been discovered. We believe that the final, and perhaps most important step for drug development, is a speedy and cost-effective means of producing a protein drug in commercial quantities, which is one of our core capabilities.

Our Strategy

LSBC's corporate strategy is to capitalize on our platform technologies to develop and commercialize the Company's own products as well as those of our clients and partners. While LSBC's GENEWARE and ProGEx protein expression and analysis platforms are broadly applicable, the Company's current focus is on developing and commercializing biomedical products and biomanufacturing services. LSBC also generates near-term revenue from custom discovery and development services.

LSBC's strategic business focus consists of development of the following business opportunities:

- Proprietary therapeutics and vaccines
- Gene and protein drug-target-discovery services
- Custom drug development and biomanufacturing services

The Company's genomics and bioinformatics capabilities also can be used to discover genes of medical interest. Likewise, LSBC's well-established protein isolation and analysis (proteomics) infrastructure can be used to discover drug targets as well as targets of toxicity for drugs and environmental chemicals. LSBC's genomics, proteomics and informatics processes are integrated to offer the Company, its clients and partners a powerful discovery service.

LSBC has successfully achieved proof of principle with its own human and animal-health-care therapeutics. While some early stages of biomanufacturing, regulatory and clinical development can be supported by the Company, LSBC plans to achieve advanced product development and commercialization goals in collaboration with pharmaceutical and biopharmaceutical companies. In particular, two of the Company's products, our NHL vaccine and a feline parvovirus vaccine have successfully completed early-stage clinical trials and are ready to move forward into advanced development. We have also completed manufacturing process development of a second human therapeutic product, alpha-galactosidase A to treat Fabry disease. We have received Orphan Drug designation from the FDA for this product. We are currently preparing the regulatory documents to initiate clinical trials. LSBC is in discussions with several potential partners for commercial development of our products and we expect to generate license, research and development and royalty income from these alliances. However, LSBC cannot assure you that these discussions will lead to alliances or that LSBC will realize revenue from any alliance it forms.

LSBC has been developing a unique biomanufacturing capability for proteins and peptides to capitalize on the current and anticipated capacity constraints of the biotechnology industry. We built a manufacturing facility in Owensboro, Kentucky, that is ready for FDA-compliant manufacturing of human therapeutics and vaccines developed by LSBC and our clients.

Commercial Opportunities

Products

Alpha-Galactosidase A. Alpha-galactosidase A is an enzyme used for replacement therapy to treat Fabry disease. Fabry disease is a genetic disorder that results in the inability of tissues within organs, primarily the liver, kidney and spleen, to recycle various structural lipid components resulting in the accumulation of these lipids in those organs and the heart. Fabry is an X-linked disease that usually results in death for homozygous males in the fourth or fifth decade of life.

LSBC's enzyme is produced in plants with our proprietary GENEWARE system. The enzyme is recovered and purified to clinical standards in a proprietary process that is validated and compliant with cGMP, or current Good Manufacturing Practices. The product has been produced at LSBC's biomanufacturing facility in Owensboro, Kentucky.

Preclinical data, collected to support an IND filing with the FDA, was done collaboratively with Dr. Roscoe Brady and his team at the National Institutes of Health (National Institute of Neurological Disease and Stroke) under a collaborative research and development agreement. The preclinical data in a Fabry mouse model system shows good efficacy and safety in the animals. LSBC applied for and received an Orphan Drug designation from the FDA for this molecule.

LSBC has requested a pre-IND meeting at the FDA to request guidance for filing an IND for use of alpha-galactosidase A for Fabry disease.

Aprotinin. Aprotinin is a natural protein that acts to prevent protein breakdown, and is used in medical procedures to reduce the systemic inflammatory response, or SIR, associated with cardiopulmonary bypass surgery, or CPB. Once triggered, SIR can lead to a cascade of subsequent inflammatory events that can collectively retard patient recovery. When administered intravenously in CPB procedures, aprotinin helps decrease the need for blood transfusions, reduces post-operative bleeding, and thus reduces re-exploration for bleeding. There is one aprotinin-containing product on the United States market for use in CPB that is currently obtained by extraction from bovine lungs.

LSBC has successfully produced pilot-scale quantities of bovine-identical equivalent using its proprietary GENEWARE plant-based biomanufacturing system. LSBC's aprotinin active pharmaceutical ingredient, or API, has the same biological activity as its animal-derived counterpart. When scaled to commercial-level production, the Company believes that its aprotinin could be obtained cost effectively and in sufficient quantities to meet worldwide demand, without the safety concerns associated with animal- and especially bovine-derived products.

LSBC is in discussions with potential partners for supplying the company's aprotinin to the medical and industrial markets. However, LSBC cannot assure you that we will succeed in creating commercial arrangements with these parties.

Endothelial Cell-Derived Growth Factor. LSBC has developed novel technology for stimulating the proliferation of human bone marrow and cord blood stem cells. Proprietary products and processes developed by LSBC may prove effective in a variety of applications, including the treatment of diseases of hematopoiesis, treatment of patients who receive chemotherapy and/or radiation therapy for cancer, as an adjunct to vaccine therapy, and in the facilitation of bone marrow-mediated gene therapy. LSBC expects to initiate clinical research as well as seek commercial partners for many of the potential applications of this technology.

Non-Hodgkin's Lymphoma Vaccine. During 2002, LSBC completed the clinical portion of a Phase I safety trial in humans of a patient-specific vaccine for the treatment of indolent NHL. Non-Hodgkin's or B-cell lymphoma is the sixth leading cause of death in the United States and the Western world and the only cancer for which incidence and mortality are increasing (approximately 6% per annum incidence and 3% per annum mortality). We estimate that there are between 55,000 and 80,000 new cases of NHL per year in the United States alone.

LSBC conducted a 16-patient safety trial at Stanford University Medical School in collaboration with Ronald Levy, M.D. There were no vaccine-associated adverse events reported, and 75% of the patients treated mounted either a cellular or humoral response to the vaccine. Although too small a number of patients was treated to derive statistical conclusions in this pilot study, the consistent method of manufacture, safety and immunogenicity were shown and further clinical trials are indicated. LSBC has met with the FDA and is designing a Phase III clinical trial protocol. LSBC is seeking partners to further develop this product.

Services

Biomanufacturing. LSBC has a separate facility for the biomanufacture of therapeutic proteins, vaccines and industrial biomolecules for customers and for in-house proprietary products. During 2002, LSBC focused on manufacturing our NHL vaccine and on validating our Owensboro, Kentucky facility to allow cGMP manufacturing of our NHL vaccine, alpha-galactosidase A and aprotinin, in addition to the manufacture of development stage pharmaceutical products for customers. LSBC has expanded its business development staff and is marketing aggressively its biomanufacturing capabilities to potential customers.

Proteomics Services. Protein markers are proteins that, when present in body tissues, or fluids such as blood or urine, can be used to make an early diagnosis of a disease or to track its progress. Protein markers can provide an early, accurate, simple and non-invasive technique for assessing when a person has a disease or is at risk of developing it (diagnostic markers), and the progress of an existing disease and its response to treatment (clinical markers).

In addition to utilizing our proteomics technologies for our own internal discovery efforts, we market our protein marker discovery capabilities to customers under arrangements with varying levels of intellectual property participation, research funding and success fees. Depending on a customer's preference, such arrangements may be in the form of a partnership which may include technology access fees, research funding, milestones payments and royalties or, alternatively, on a straight fee-for-service basis where we forgo downstream participation in exchange for higher research funding. In 2002, we were awarded a five-year, $12.2 million fee-for-service proteomics contract by the National Institute of Environmental Health Sciences.

Agricultural Genomics. LSBC has substantial expertise in the field of agricultural genomics. Using our GENEWARE system, we can rapidly screen large numbers of unknown genes contained in high-quality gene "libraries" for gene function. This system was applied successfully to the discovery of useful genes for commercial crops during our multi-year alliance with the Dow Chemical Company. In addition, LSBC's GENEWARE system may be useful for the production of protein products for agricultural applications. For example, LSBC has extended its contractual alliance with Growers Research Group for the production of bovine lysozyme with potential applications in remediation of certain important plant pathogens. LSBC is seeking new partners to expand its commercial base in agriculture.

Our Technologies

Genomics and Proteomics

GENEWARE, our core technology, is a modified plant viral vector system we use to insert genes rapidly and temporarily into host organisms, usually plants in the *Nicotiana* genus. We use GENEWARE for gene discovery, gene function analysis and protein production. GENEWARE viral vectors carry a gene sequence of interest into a cell of a host organism. With conventional transgenic, or GMO, technology, the gene sequence is inserted into the chromosomes of the host in the nucleus where it is converted into mRNA. The mRNA then moves outside the nucleus to the

cytoplasm where it is translated into protein. GENEWARE is "non-GMO" in that GENEWARE does *not* use the traditional transgenic methods of inserting a gene into the genome of the host organism. The use of GENEWARE does not permanently alter the genetic makeup of the plant or other organism.

We can use GENEWARE in several ways to discover gene function. In one method, we insert a gene of unknown function into the GENEWARE vector (a plant virus) that is then inoculated onto a plant causing changes in the inoculated plant that can be analyzed to rapidly determine the function of that gene. In another method, we insert a gene sequence into our GENEWARE vector that reads in a backwards, or "antisense" manner to the natural gene. The antisense sequence will cause the natural gene in the plant to be turned off. We can then analyze the plant for any biochemical changes that occur which, in turn, tell us the function of the natural gene. These methods of discovering the function of previously unknown genes allow us to find genes that have commercial utility.

LSBC's proteomics technology allows for the rapid determination of the protein composition, or proteome, of cells, tissues and body fluids. Protein composition is a listing of the specific proteins present in a given sample, and their amounts. We can rapidly identify and quantify a significant range of proteins found in normal human tissues and body fluids and the changes in proteins that are caused by diseases or by the use of particular drugs. We believe that proteomics is becoming very important in discovering and developing therapeutics, and in predicting, diagnosing and monitoring diseases. We believe that our proteomics expertise can be used to derive information that is currently unavailable using gene identification alone.

LBSC's GENEWARE and ProGEx technologies, used in combination, can reveal comprehensive genetic information from identification of gene function through quantitative and qualitative descriptions of identified proteins resulting from turning a gene on or off. We are continuing to integrate our proteomics and genomics technology platforms. We believe that this integration effort is a significant competitive advantage in our product development strategy.

Biomanufacturing

LSBC also uses GENEWARE to manufacture therapeutic proteins, peptides and other molecules in plants. GENEWARE can achieve significant time and cost advantages over traditional, transgenic genetic-engineering systems and alternative manufacturing technologies. GENEWARE can be a very efficient and competitive protein production system due to its potential for high expression, speed of production, safety (non-mammalian cell system) and the fact that minimal capital expenditures are required compared to alternate expression systems. LSBC uses its Owensboro, Kentucky production facility for the custom production of protein products from plants, including those proteins produced using GENEWARE technology. The Company will be seeking FDA approval for a human Phase III trial of our NHL vaccine, which the Company plans to conduct after securing a partner. The Company also is seeking FDA approval for the initiation of human clinical trials of our alpha-galactosidase A as a therapy for Fabry disease. Since 1991, LSBC has conducted more than ten USDA-approved field trials, each demonstrating that GENEWARE is environmentally safe. We believe that GENEWARE is environmentally safe because the viral vector and the genes we insert cannot be incorporated into the plant genome and, thus, cannot be transmitted to the next generation of the plant in the seed or pollen; it has a limited host range; and the modified virus does not persist in the soil to the next planting season. In addition, LSBC applies its GENEWARE system only to non-food crops. LSBC follows standard operating procedures during field and greenhouse production and testing to further ensure environmental safety.

Bioinformatics

LSBC generates large amounts of data when working with genes and proteins. Bioinformatics is the word we use to define our gathering, storage, analysis, retrieval and manipulation of this data using computers. Our bioinformatics infrastructure comprises the entire collection of laboratory information management systems (LIMS), relational database technology, analysis tools and various other hardware and software supporting our development efforts. We use very sophisticated techniques in advanced computer programming and engineering to integrate proprietary software, relational database programming, load balancing, batch management processing, and client-side applications to integrate and manage all types of biological information.

In addition, to increase our understanding of the biological importance of our data, our proprietary data are joined with publicly available biological data and stored in a relational database for data mining and discovery purposes. These combined data sets are used by LSBC scientists for product and discovery applications.

We believe our bioinformatics resources are important components of the Company's competitiveness and of great value to our product development initiatives.

Intellectual Property

LSBC continually seeks patent protection for our proteomics, genomics, biomanufacturing, and plant and animal viral gene expression technologies. As of December 31, 2002, we had 57 issued and 109 pending U.S. patents. Our issued U.S. patents expire between 2006 and 2020. Foreign patents corresponding to many of the U.S. patents and patent applications have been filed and/or issued in one or more other countries, resulting in a total of 50 issued and 142 pending foreign patents as of December 31, 2002. We believe that these issued patents in various technological areas are valuable to our business. In the plant and animal viral systems field, we have 19 issued U.S. patents and 47 issued foreign patents with durations ranging from 2011 to 2018. In the proteomics field we have 29 issued U.S. patents and 1 issued foreign patent with durations ranging from 2006 to 2020. In the genomics field, we have 3 issued U.S. patents with durations to 2018. In the bioprocessing field, we have 6 issued U.S. patents and 2 issued foreign patents with durations through 2018. While our patents are an important element of our success, our business as a whole is not materially dependent on any one patent.

These patents give us the right to exclude others from practicing or selling products, technologies or services covered by the methods claimed, and from making, using or selling the products which are the subject of the claims of these patents.

A registered trademark gives the owner the right to exclude others from using identical or confusingly similar marks within the same channels of commerce. We own or own rights to many registered trademarks and unregistered marks in the United States and in many other countries.

LSBC also relies upon copyright protection, trade secrets, continuing technological innovation and licensing from others to protect our intellectual property. Our success will depend, in part, on our ability to obtain patent protection for our products and processes, to preserve our copyrights and trade secrets, to operate without infringing the proprietary rights of third parties and to acquire licenses, if needed, to support or enhance our intellectual property portfolio.

Collaborations

LSBC's revenue has been derived principally from collaborations with others. The business structure varies depending on the specific product or research objectives of the collaborations and whether the client is a business, a government agency, or an academic institution. In general, LSBC receives immediate funding for license and technology access fees and for reimbursement of costs to LSBC. We also seek to share in the long-term value of the products that we assist our collaborators in developing through the retention of certain product rights and from royalty fees from the future sale of products developed using our technologies. Other collaborations take the form of alliances to jointly commercialize product applications evolved from combining specific technologies of each company.

LSBC also provides, or has provided, research and development stage biomanufacturing services to other companies and entities including Novozymes Biotech, Inc., ApoImmune, Inc., Growers Research Group LLC, Weyerhauser Company and the University of Arkansas for Medical Sciences. Manufacturing agreements may include payment to LSBC for costs associated with scale-up of manufacturing processes, payments for supply of product and royalties on product sold. Research agreements may include payments for technology access, costs of research, certain rights to intellectual property developed and participation in sales of products resulting from the agreements.

LSBC also actively seeks revenue from government funding sources that promote the development of products having strategic importance to us. For example, LSBC has worked with the U.S. Navy under a Collaborative Research and Development Agreement for the development of a protein-based product that increases stem cell proliferation. The Company also received a multi-year contract with the National Institute of Environmental Health Sciences to provide proteomics services for application in toxicogenomics and we have also received a multi-year grant from the National Institute of Standards and Technology to develop new vaccine production technologies.

Employees

As of March 21, 2003, LSBC has 114 full-time employees, of which 86 are engaged in research and development or biomanufacturing activities and the remainder work in general and administrative areas. Twenty of our employees hold Ph.D. degrees.

Research and Development

LSBC's internally funded research and development expenses totaled $21.2 million, $22.4 million and $16.4 million in 2002, 2001 and 2000, respectively. Our customer-sponsored research and development expenditures totaled $1.2 million, $3.5 million and $8.1 million in 2002, 2001 and 2000, respectively.

Competition

The markets for protein development and production, including human vaccines and therapeutics such as the ones we are developing, are highly competitive. Competitors with substantially greater resources are actively developing products similar to, or competitive with, our products. Several pharmaceutical, biotechnology, chemical and other life sciences companies engage in research and development in the use of novel gene expression systems to produce therapeutic proteins. Other companies are developing and marketing therapeutics for NHL. Two other companies are marketing products overseas that would or might be competitive with our alpha-galactosidase A product.

We and others compete in the emerging fields of functional genomics and proteomics on the basis of technological innovations that offer time and cost advantages for the accomplishment of specific tasks, many of which were not previously practical. We believe our proprietary technology, and our significant patent portfolio, will allow us to compete effectively in these fields. However, we expect new developments to continue and discoveries by others may render our potential products and technologies non-competitive.

Item 2. Properties

LSBC's principal research and development facility and corporate headquarters are located in Vacaville, California, at a facility of approximately 45,000 square feet that includes administrative offices, a genetic engineering laboratory, a plant discovery and function laboratory and a bioinformatics software laboratory, under a lease that expires on February 28, 2004. We also own a facility of approximately 22,000 square feet and approximately 20 acres of land in Owensboro, Kentucky for pilot and large-scale extraction and downstream biomanufacturing of protein products produced in plants. Our proteomics division presently occupies a laboratory and office facility in Germantown, Maryland of approximately 53,000 square feet, under a lease that expires on December 31, 2010.

Item 3. Legal Proceedings

From time to time we become a party to legal proceedings that are incident to our normal business operations such as employment litigation. In the opinion of management, these lawsuits will not result in any material adverse effects on the Company's financial condition.

Item 4. Submission of Matters to a Vote of Security Holders

Not applicable.

Part II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters

Market Information. The Company's common stock is traded on the NASDAQ National Market under the symbol "LSBC." Public trading of our common stock commenced on August 10, 2000. The following table sets forth the high and low sale price per share of the Company's common stock during each quarter of 2002 and 2001.

	High	Low
Year Ended December 31, 2002:		
Fourth Quarter	$ 1.80	$0.77
Third Quarter	2.26	1.15
Second Quarter	3.59	1.04
First Quarter	5.00	2.80
Year Ended December 31, 2001:		
Fourth Quarter	$ 5.50	$3.20
Third Quarter	7.55	2.63
Second Quarter	8.63	3.40
First Quarter	15.69	4.38

Holders. Based upon data provided by our transfer agent, the Company had approximately 6,020 beneficial holders of our common stock as of March 20, 2003. This total includes persons whose stock is in nominee or "street name" accounts through brokers.

Dividends. The Company has never declared or paid any cash dividends on its common stock and we do not anticipate declaring any dividends in the foreseeable future. We currently intend to reinvest future earnings, if any, for use in research and development or other business needs.

Use of Proceeds. During the third quarter of 2000, the Company received net proceeds of approximately $89 million from an initial public offering, or IPO, of common stock. Provided below is a reasonable estimate of the amount of IPO net proceeds used in each of the following categories, through December 31, 2002:

Construction of plant, building and facilities	$ 2,329,000
Purchase of machinery and equipment	7,701,000
Construction of leasehold improvements	5,993,000
Repayment of indebtedness	3,664,000
Purchase of intellectual property licenses	3,264,000
Capitalized patent costs	1,680,000
Working capital	43,185,000
Cash and investments	20,940,000

The use of proceeds for working capital includes expenditures for research and development and general and administrative activities. Cash and investments consist of money market funds, commercial paper, corporate and U.S. government agency notes, and bank certificates of deposit.

None of the IPO net proceeds were paid directly or indirectly to directors, officers, or their associates, persons owning 10 percent (10%) or more of any class of our equity securities, or our affiliates. The use of IPO net proceeds set forth above does not represent a material change from the anticipated use of proceeds described in the prospectus contained in our Registration Statement on Form S-1 (SEC Registration No. 333-34198), declared effective on August 9, 2000.

Item 6. Selected Financial Data

You should read the following selected financial data in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our audited consolidated financial statements and related notes included in Part IV of this Report. We derived the consolidated statement of operations data for the years ended December 31, 2002, 2001 and 2000 and the consolidated balance sheet data as of December 31, 2002 and 2001 from our audited consolidated financial statements included in this Report. We derived the consolidated statement of operations data for the years ended December 31, 1999 and 1998 and the consolidated balance sheet data as of December 31, 2000, 1999 and 1998 from our audited consolidated financial statements not included in this Report.

	Year ended December 31,				
	2002	2001	2000	1999	1998
	In thousands, except share and per share data				
Consolidated Statement of Operations Data					
Revenues	$ 2,622	$ 17,731	$ 23,291	$ 16,090	$ 3,394
Costs and expenses:					
Development agreements	1,247	3,467	8,115	7,439	2,565
Research and development	21,191	22,391	16,373	9,491	6,973
General and administrative	12,595	14,373	8,119	7,977	3,492
Impairment of goodwill	839	—	—	—	—
Stock compensation bonus	—	—	7,268	—	—
Purchased in-process research and development	—	—	—	21,362	—
Amortization of goodwill and purchased intangibles	624	1,300	1,197	623	—
Total costs and expenses	36,496	41,531	41,072	46,892	13,030
Gain on litigation settlements	—	—	—	1,300	1,890
Loss from operations	(33,874)	(23,800)	(17,781)	(29,502)	(7,746)
Total other income (expense)	690	3,111	1,481	(5,203)	(1,009)
Loss before provision for income taxes	(33,184)	(20,689)	(16,300)	(34,705)	(8,755)
Provision for income taxes	—	—	—	190	—
Net loss	$ (33,184)	$ (20,689)	$ (16,300)	$ (34,895)	$ (8,755)
Net loss per share—basic and diluted	$ (1.33)	$ (0.84)	$ (1.07)	$ (3.76)	$ (0.93)
Weighted average shares outstanding—basic and diluted	24,991,201	24,599,126	15,251,575	9,275,228	9,366,774

	December 31,				
	2002	2001*	2000	1999	1998
	In thousands				
Consolidated Balance Sheet Data					
Cash and cash equivalents	$ 8,238	$ 24,055	$ 40,030	$ 6,975	$ 3,484
Marketable securities	14,840	24,724	44,971	7,124	4,086
Working capital (deficit)	22,690	46,690	70,853	(1,514)	2,514
Total assets	44,741	76,912	106,943	31,762	17,590
Long-term debt and warrant liability	165	249	423	13,837	4,061
Convertible preferred stock	—	—	—	40,497	15,848
Accumulated deficit	(148,905)	(115,721)	(95,032)	(78,732)	(43,837)
Total stockholders' equity (deficit)	42,659	73,037	89,792	(6,703)	2,927

* Certain 2001 amounts have been reclassified to conform to the 2002 presentation.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of our financial condition and results of operations should be read in conjunction with Item 6, "Selected Financial Data" and our audited consolidated financial statements and related notes included in Part IV of this Report. This discussion includes forward-looking statements, such as our projections about future results of operations that are inherently uncertain. Our actual results could differ materially from those anticipated in our forward-looking statements as a result of many factors including, but not limited to, those discussed in "Factors That May Affect Our Business" in this item.

Overview

The Company's financial position and results of operations are summarized as follows:

- Between 1998-2001, the Company's revenues were almost entirely earned from a research collaboration with The Dow Chemical Company and its subsidiary, Dow AgroSciences LLC, or collectively, Dow. Under our agreement with Dow, the Company received funding for sponsored genomics research and payments for technology access rights and milestone achievements. We earned over $52 million in revenue from this collaboration, representing at least 84% of our total revenues in each year between 1998 and 2001. This research collaboration ended in August 2001.
- We do not currently have any research collaborations with revenue similar to our agreement with Dow. Additionally, certain of our key products including the NHL vaccine and alpha-galactosidase A enzyme-replacement therapy have remaining development periods extending past 2003. As such, we believe that in order for us to realize significant revenue growth in 2003, we must pursue a number of revenue sources including new collaborations, government contracts and grants, biomanufacturing supply agreements, other product sales, and license fees.
- The Company incurred negative operating cash flows of $23.9 million, $18.5 million and $13.0 million in 2002, 2001 and 2000, respectively. This increasingly negative trend of operating cash flows is primarily attributable to the completion of the Dow collaboration in August 2001 and the lack of significant revenues from other collaborators or customers over the three-year period. We expect to continue realizing material negative operating cash flows until, and if, we begin generating significant revenues.
- Our working capital balance equaled $22.7 million at December 31, 2002. Based upon our net operating cash usage of $3.8 million in the fourth quarter of 2002, we believe that our working capital is sufficient to support our current level of operations through at least March 31, 2004. However, we expect to reduce our current rate of cash usage based upon cost savings initiatives that we expect to implement in 2003. We may begin realizing such cost savings in the second quarter of 2003. Absent material reductions in our cash operating expenses, the Company's ability to continue as a going concern significantly beyond March 31, 2004 depends on our ability to generate significant revenues and/or pursue other potential sources of working capital including partnerships, mergers or sales of assets or technologies. However, we cannot provide any assurance that we will realize significant revenue growth or reduce our operating costs, or that other sources of working capital will be available to the Company.

Results of Operations

Revenues—Revenues decreased $15.1 million, or 85%, in 2002 and $5.6 million, or 24%, in 2001. These decreases are primarily attributable to the completion of our research collaboration with Dow in August 2001 and the lack of significant revenues from other collaborators or

customers since that time. Revenues from Dow equaled $15.1 million and $20.0 million in 2001 and 2000, respectively.

One of our material revenue generating contracts as of December 31, 2002 was terminated by us in the first quarter of 2003. While we expect to generate new revenue sources in 2003, based solely upon our other revenue generating contracts as of December 31, 2002, we expect revenues in 2003 to be slightly higher than 2002.

Development agreement costs—Development agreement costs consist mainly of personnel expenses and research materials related to activities performed under revenue generating research agreements. Development agreement costs decreased $2.2 million, or 64%, in 2002 and $4.6 million, or 57%, in 2001. These decreases are primarily attributable to the completion of our research collaboration with Dow in August 2001. We expect future development agreement costs to fluctuate consistently with increases or decreases in revenues earned from new research agreements.

Research and development expenses—Research and development expenses consist mainly of internal personnel, consulting and outside research services, and materials related to unreimbursed research activities. Research and development expenses decreased $1.2 million, or 5%, in 2002 and increased $6.0 million, or 37%, in 2001. The decrease in 2002 is primarily attributable to a company-wide restructuring in June 2002 that reduced the Company's headcount by 25% as well as the cancellation of certain consulting and outside research services. The increase in 2001 was primarily attributable to the reallocation of resources from activities associated with the Dow research collaboration to internally funded research projects. For reporting purposes, this reallocation of resources resulted in increased research and development expenses and decreased development agreement costs. The increase in 2001 was also due to the hiring of additional research personnel and increased facility costs related to the Company's proteomics division. We expect research and development expenses in 2003 to be lower than 2002 as a result of our past and continuing cost reduction efforts.

General and administrative expenses—General and administrative expenses decreased $1.8 million, or 12%, in 2002, and increased $6.3 million, or 77%, in 2001. Excluding $1.7 million of nonrecurring charges in 2002 for headcount reductions ($871,000) and write-downs of property and equipment ($433,000) and capitalized patent costs ($396,000), general and administrative expenses decreased $3.5 million, or 24%, in 2002. The decrease in 2002 is primarily attributable to a company-wide restructuring in June 2002 that reduced the Company's headcount by 25%. The increase in 2001 was attributable to several factors including: personnel additions and consulting services related to business development and public and investor relations activities commencing in 2001; personnel additions and production costs related to regulatory and shareholder reporting requirements after the Company's IPO in August 2000; greater outside legal costs related to an increased volume of patent applications in 2001; and increased facility costs related to the Company's proteomics division. We expect general and administrative expenses in 2003 to be lower than 2002 as a result of our past and continuing cost reduction efforts.

Impairment of goodwill—We concluded at December 31, 2002 that our goodwill balance was fully impaired given the fair value of our proteomics division was determined to be less than its carrying value. We recognized an $839,000 charge in 2002 to write off the remaining balance of goodwill.

Stock compensation bonus—The non-cash charge of $7.3 million in 2000 related to stock options issued to certain Company officers and employees in December 1999 that vested concurrent with the Company's IPO in August 2000.

Amortization of goodwill and purchased intangibles—Amortization expense relates to the Company's purchase of Large Scale Proteomics Corporation ("Proteomics") in 1999. Amortization expense decreased $676,000 in 2002 as goodwill and certain purchased intangibles were no longer amortized effective January 1, 2002 in accordance with Statement of Financial Accounting Standards ("SFAS") No. 142. Amortization expense in 2003 of our Proteomics purchased intangibles will equal $52,000.

Interest income—Interest income decreased $2.5 million in 2002 and increased $562,000 in 2001. The decrease in 2002 is attributable to the Company's declining cash and marketable securities balances available for investment and significant reductions in interest yields throughout 2001 and 2002. The increase in 2001 was attributable to a full year of investment of the available proceeds from the Company's IPO in August 2000. We expect interest income in 2003 to be lower than 2002.

Change in fair value of warrant—The non-cash charge of $811,000 in 2000 related to an increase in the fair value of a warrant issued to Dow in connection with our research agreement. We reclassified the warrant from a liability to stockholders' equity in 2000 and no subsequent charges were incurred.

Liquidity and Capital Resources

The following table summarizes the Company's usage of cash, cash equivalents and marketable securities in 2002, 2001 and 2000.

	Year Ended December 31,		
	2002	2001	2000
Net cash used in operating activities, excluding marketable securities activities	$(24,210,000)	$(19,253,000)	$(12,197,000)
Cash used in investing activities, excluding marketable securities activities	(1,597,000)	(16,054,000)	(5,289,000)
Net cash provided by (used in) financing activities	106,000	(915,000)	88,388,000
Net increase (decrease) in cash, cash equivalents and marketable securities	(25,701,000)	(36,222,000)	70,902,000
Cash, cash equivalents and marketable securities at beginning of year	48,779,000	85,001,000	14,099,000
Cash, cash equivalents and marketable securities at end of year	$ 23,078,000	$ 48,779,000	$ 85,001,000

As noted below, we progressively improved our operating cash flows in 2002. However, our current rate of cash usage is not sustainable for a long-term period compared to our balance of cash, cash equivalents and marketable securities at December 31, 2002. Given our current financial condition and recent financial performance, we believe our ability to attract additional working capital through equity or debt issuance is limited. We may have opportunities to enter into partnerships with other companies to support the development of specified products. However, such support would likely not be available to all of our research projects. Accordingly, we must fund our current liquidity needs through significant improvements in our operating cash flows. Such improvement is primarily dependent on our ability to generate significant revenue growth in 2003.

Our liquidity needs may adversely affect our product development efforts. We have delayed further clinical trials of our NHL vaccine until such time as we secure funding from a partner. If

we are unsuccessful in partnering the cost of these clinical trials, further development of this product may be delayed indefinitely. We are also pursuing a partner to fund the clinical trials of our alpha-galactosidase A product. We may also delay other key products or technologies currently under development. Delays incurred in the development of our products may impair our ability to generate new sources of revenue.

Net cash used in operating activities, excluding marketable securities activities—The Company's 2002 quarterly operating cash usage is set forth below:

Quarter Ended	Net Cash Used in Operating Activities, Excluding Marketable Securities Activities
March 31	$7,264,000
June 30	7,523,000*
September 30	5,608,000
December 31	3,815,000

* Includes $1.0 million in restructuring related disbursements.

In 2002, we reduced our operating cash usage by 47% between the first quarter and the fourth quarter. The improvement in our operating cash usage is primarily attributable to cost reductions in both research and development activities and general and administrative activities. Additionally, new sources of revenue in 2002 resulted in increased revenues each quarter in 2002 from $425,000 in the first quarter to $997,000 in the fourth quarter. We expect to realize negative operating cash flows in the year ended December 31, 2003 although lower in amount than 2002.

Cash used in investing activities, excluding marketable securities activities—Capital expenditures equaled $968,000, $12.3 million and $4.5 million in 2002, 2001 and 2000, respectively. In 2001, we invested $7.7 million in our proteomics division, primarily for leasehold improvements to a new and expanded research facility in Maryland. In addition, we invested $2.4 million in our biomanufacturing division for continued construction of our biomanufacturing plant in Kentucky. Our 2002 capital expenditures primarily related to the completion of construction of our biomanufacturing plant. The Company had no material capital expenditure commitments at December 31, 2002. We believe the infrastructure and capacity of our research facilities in California and Maryland and our biomanufacturing plant in Kentucky are sufficient to support the Company's business objectives in the near term. Accordingly, we do not expect significant amounts of capital expenditures in 2003. However, our projection may change based upon the requirements of any new research or biomanufacturing supply agreements that we may enter.

In 2001, we paid $3.1 million in license fees for the rights to utilize specified intellectual property for future periods. The Company may enter into additional licensing agreements in the future when acquiring rights to certain technologies creates product development opportunities.

Net cash provided (used in) by financing activities—The improvement in cash flows from financing activities in 2002 compared to 2001 is primarily attributable to lower debt repayments which equaled $46,000, $2.1 million and $2.9 million in 2002, 2001 and 2000, respectively. In 2000, the Company received net proceeds of $88.8 million from our IPO.

Commitments

Set forth below is a summary of the Company's non-cancelable commitments to make minimum payments under contractual obligations as of December 31, 2002:

	Payments Due By Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Long-term debt	$ 310,000	$ 145,000	$ 66,000	$ 73,000	$ 26,000
Operating leases	7,920,000	1,758,000	1,754,000	1,685,000	2,723,000
Research agreements	136,000	136,000			
License agreements	31,000	31,000			
Total	$8,397,000	$2,070,000	$1,820,000	$1,758,000	$2,749,000

The Company leases facilities in Vacaville, California and Germantown, Maryland under operating leases. The Company has research sponsorship agreements with major universities, government institutions or other companies whereby the Company funds specific projects of interest to the Company. In addition to the future non-cancelable minimum payments above, certain of the research agreements require future aggregate payments of $102,000 if the agreements are not cancelled. The Company does not have any capital lease obligations, purchase obligations or other long-term liabilities.

Critical Accounting Policies

The Company's accounting policies are explained in Note 1 to the audited consolidated financial statements included in Part IV of this Report. We consider the following accounting policies to be critical given they involve estimates and judgments made by management and are important for our investors' understanding of our operating results and financial condition.

Revenue Recognition—We earn revenues from several sources including: 1) research and collaboration agreements and government grants that consist of one or more revenue sources including technology access fees, milestone payments and research funding; 2) license fees; and 3) royalties. We recognize revenues for each of these components as follows:

Technology access fees are typically up-front, non-refundable payments and represent consideration from our collaboration partners for access and rights to the Company's technologies for the term of the research agreement. The Company's technologies are normally integral to the objectives of the research collaboration and, therefore, receipt of a technology access fee does not represent the culmination of an earnings process. Accordingly, we recognize revenue from technology access fees on a straight-line basis over the original term of the agreement, not including renewal periods unless renewal is assured at the time the agreement is executed. The unrecognized portion of technology access fees is reported as deferred revenue.

Milestone payments are triggered by the Company's achievement of performance objectives that are defined in research agreements. Milestone achievements typically require acceptance or approval by our collaboration partners. Also, our collaboration partners retain access to the technologies underlying the milestone achievement for the remaining term of the agreement. Accordingly, we recognize revenue from milestone payments on a straight-line basis from the date of completion of the applicable performance objective to the end of the original term of the agreement, not including renewal periods unless renewal is assured at the time the agreement is executed. The unrecognized portion of milestone payments is reported as deferred revenue.

We receive funding for sponsored research or feasibility studies from commercial companies, government agencies and educational institutions. Funding for sponsored research or feasibility studies is typically non-refundable and not based upon performance objectives or customer acceptance. Also, we may receive funding in the form of periodic payments or reimbursement of actual costs. Accordingly, revenue from sponsored research and feasibility studies is recognized using the percentage of completion method or recognized as expenses are incurred depending on the form of funding. Under the percentage of completion method, the total contract value is multiplied by the percentage of actual research costs incurred to date compared to the estimated total costs to complete the contract as a whole. If collection of any funding is not assured, revenue recognized is limited to the lesser of the percentage of completion calculation or actual cash received to date. Revenue received for equipment purchases is deferred and recognized as revenue over the life of the agreement.

We provide licenses to third parties for the exclusive or non-exclusive access to certain of the Company's technologies for commercial development purposes. We may receive fees from such licenses in the form of up-front payments, additional payments upon achievement of milestones, and royalty rights upon the successful commercialization by the licensee of a product containing the licensed technology. License agreements normally provide the licensee with immediate access to the Company's technology and do not require the Company to provide any research services or other support toward the licensee's commercial development efforts. Accordingly, we recognize up-front license fees as revenue upon the effective date of the licensee's first access to the Company's technologies. Additional license fees payable upon achievement of milestones are recognized as revenue upon such achievement and royalty payments are recognized as revenue when earned by the Company.

Intangible and Long Lived Assets—The Company's intangible and long-lived assets include capitalized costs of filing patent applications that relate to commercially viable technologies, capitalized license fees for rights to specified intellectual property, and property and equipment related to our research facilities in California and Maryland and our biomanufacturing plant in Kentucky. All intangible and long lived assets are amortized or depreciated over the shorter of (1) their estimated useful lives, (2) the estimated period that the assets will generate revenue, or (3) the statutory or contractual term in the case of patents and intellectual property licenses. Estimates of useful lives and periods of expected revenue generation are reviewed periodically for appropriateness and are based upon management's judgment. We evaluate our intangible assets and our long-lived assets for impairment in accordance with SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. If any of our intangible assets or long-lived assets are considered to be impaired, the amount of impairment to be recognized is equal to the excess of the carrying amount of the assets over the fair value of the assets.

Stock-Based Compensation—The Company normally grants stock options having fixed exercise prices and a fixed number of shares of common stock that may be acquired. We account for stock options granted to employees and directors, as well as other stock-based employee compensation plans, using the intrinsic value method of accounting. As such, we recognize compensation expense for stock options only if the quoted market value of the Company's common stock exceeds the exercise price of the option on the grant date. Any compensation expense realized per the intrinsic value method is amortized over the vesting period of the option. Stock options issued to non-employees as consideration for goods or services provided to the Company are accounted for under the fair value method, which requires that compensation expense be recognized for all such options.

Inflation

The Company believes that inflation has not had a material adverse impact on our business or operating results during the periods presented.

Factors That May Affect Our Business

Risks Related To Our Business

In an environment of diminished revenue, we may not be able to preserve working capital and extend the viability of the Company

Because we are experiencing diminished revenue and cash flow, we are funding virtually all of our product development initiatives internally. At the same time, because our cash flow is substantially reduced compared to the last three years, we are experiencing increasing pressure to curtail spending and otherwise reduce costs. We implemented a major reorganization in June 2002 to reduce costs. If we cannot increase our cash flow in the very near term, we likely will be required to take one or more of the following actions: further reorganize our operations; delay, reduce the scope of, or eliminate one or more of our research and development programs; significantly reduce patent-related expenses, effectively foregoing our rights to future technologies or products; obtain funds through arrangements with collaborative partners or others that may require us to relinquish rights to certain of our technologies, product candidates or products that we would otherwise seek to develop or commercialize on our own; or sell or license the rights to certain of our products or technologies on terms that are worse than we might have been able to obtain in a different environment. If our cash flows continue to deteriorate or we take significant steps to reduce our expenses, potential collaborators may questions our ability to perform and choose not to do business with us, which would make it harder for us to improve our cash flows.

We have negative cash flow and may not have sufficient cash to continue operations. Or, even if we can continue operations, we may not have sufficient cash to effectively manage our working capital requirements and fund our operations for the period required to achieve profitability.

Since our inception, we have never generated enough cash to cover our expenses and we will need to continue to spend substantial funds to continue our product development programs. We do not know with certainty whether our cash reserves and any cash flows from operations or financing will be sufficient to fund our operations significantly beyond 2003. We may be unsuccessful in entering into any new collaboration that results in significant revenues or cash flow. We have limited cash and credit available, and may be unable to raise additional financing or establish additional lines of credit to meet our anticipated and unanticipated working capital requirements. Our future capital requirements depend upon many factors, including:

- our ability to increase revenues;
- the number of products we have under development;
- the timing of, and extent to which we are faced with, unanticipated development or technological challenges or regulatory pressures;
- our ability to successfully transfer liability for or restructure long-term facility leases for facilities that exceed our present capacity needs; and
- the willingness of pharmaceutical and biopharmaceutical companies to partner with us.

In the event we raise capital via equity financing, our existing stockholders could experience significant dilution, as our stock price is less than $1.00 and we expect that the amount of additional capital we will require would be substantial. We may raise this capital through public or private financings or additional collaborations, strategic partnerships or licensing arrangements. If adequate funds are not available to satisfy either short- or long-term capital requirements, we might be required to significantly limit or cease our operations or delay or abandon some of our planned future expenditures, any of which actions could harm our business.

If our common stock ceases to be listed for trading on the NASDAQ National Market, the value and liquidity of your investment may be adversely affected.

We are in danger of being delisted from the NASDAQ National Market. On January 24, 2003, we received a notice from the NASDAQ Qualifications Department that indicated that our common stock had closed for 30 consecutive trading days below the applicable minimum bid price of $1.00. Under current NASDAQ National Market listing requirements, we have 180 calendar days from the date of the NASDAQ Qualification Department's notice in which to demonstrate that the market price for our common stock has closed at or above a bid price of $1.00 per share for at least ten consecutive trading days. To ensure continued listing on the NASDAQ National Market, the Company must regain compliance with the minimum bid price requirement and thereafter maintain compliance with the minimum bid price requirement and the other NASDAQ National Market listing requirements. We cannot assure you that we will regain or maintain compliance with these requirements. If we do not meet these requirements, we expect that our common stock would be traded on the NASDAQ SmallCap Market or the NASD Over-The-Counter Bulletin Board. In the event of delisting from the NASDAQ National Market, we expect to pursue listing on the NASDAQ SmallCap Market. Further, if we fail to comply with the NASDAQ National Market listing requirements, the ability of stockholders to buy and sell shares of our common stock might be affected and the efficiency of the trading market for our common stock could significantly impair our ability to raise capital in the public markets should we desire to do so in the future. In addition, our stock could also potentially be subject to what are known as the "penny stock" rules, which place additional requirements on broker-dealers who sell or make a market in such securities. Consequently, if we were removed from the NASDAQ National Market, the ability or willingness of broker-dealers to sell or make a market in our common stock might decline.

We have a history of losses and cannot predict when we will become profitable, if at all

We have had net losses in each year since our inception in 1987. We sustained a net loss of $33.2 million in 2002, and had an accumulated deficit of $148.9 million as of December 31, 2002. From September 1998 through August 2001, almost all of our revenues came from our research collaboration with Dow. The research collaboration with Dow ended on August 31, 2001 and we expect no additional revenues under our contract with Dow for the foreseeable future. We have not yet entered into any new collaborations of a magnitude that could make up for the decrease in cash flow and revenues resulting from the completion of our research collaboration with Dow. We expect to continue to spend significant amounts to develop products and to fund our operations. As a result we will need to generate significant additional revenues from collaborations and the commercialization of our products and technologies to achieve profitability. We expect to incur substantial losses in the foreseeable future. If we are unable to enter into major new collaborations, control our operating expenses and successfully commercialize our products and technologies, we may never become profitable and we may fail.

We likely will require additional capital

In order for us to develop profitable and cash-positive operations, we must generate revenue from our products under development and our technologies. Since our inception, we have never generated enough cash to cover our expenses and we expect to continue to spend substantial funds to continue our product development programs. In addition, the risks inherent in developing innovative products, such as NHL vaccines, make it difficult to forecast with certainty the capital required to commercialize our products. If our capital resources are insufficient to meet future capital requirements and expenses, we will have to raise additional funds. If we raise additional funds by issuing equity securities, our existing stockholders may be diluted. We may raise this capital through public or private financings or additional collaborations, strategic partnerships or licensing arrangements. We expect that the amount of additional capital we will require would be substantial. Our access to capital markets may be restricted by depressed stock valuations over an extended period of time. We may be unsuccessful in entering into any new collaboration that results in significant revenues or cash flow. If we are unable to raise sufficient additional capital or generate sufficient cash flows, we will have to curtail or cease operations.

Our previous or future workforce reductions may hurt the performance of our continuing personnel, and make it more difficult to retain the services of key personnel.

We restructured our operations in 2002, resulting in substantial workforce reductions. These reductions were effected in all functional areas. These personnel reductions or future reductions may create concerns about job security. This may lower productivity or make it more likely that some of our key employees will seek new employment and require us to hire replacements. These reductions also may make the management of our business more difficult and make it harder for us to attract employees in the future.

We are at an early stage of product commercialization, and we may not be able to successfully develop our products and technologies nor sustain commercial use of our technology

We are in an early stage of commercialization, and we are subject to all the risks inherent in the development of a business enterprise, including the need for substantial capital to support the development of our products and technologies.

Our anticipated products, including our novel vaccines for the treatment of NHL, most likely will require that we enter into new collaborations before we can manufacture and/or market them. Vaccines are also subject to the governmental regulatory process. Because we are in new and developing fields, and our research focuses on new and unproven products, our therapeutic vaccines, proteins and other therapeutics under development may not be effective in humans, or may not meet regulatory requirements for safety and efficacy. In addition, even if we successfully develop a product, there may not be a substantial commercial market for that product at commercially viable prices.

We are in new and developing fields and there may not be a market for our technologies

Our technologies, including our ProGEx system and GENEWARE technology, have limited commercial precedent. Much of our research is fundamentally unique and we cannot assure the acceptance of its scientific merit or the benefits of products produced by it, nor that the public will react favorably to it. The usefulness of the information and products generated by our proteomics, functional genomics and bioinformatics technologies is unproven, and our collaborators and potential collaborators may determine that they are not useful or cost-effective. We generate large amounts of data from our research with genes and proteins and we

may not be able to mine or integrate this data in a timely manner, or turn it into commercially viable information. In addition, we must complete development of our technologies in time to meet market demand, if any. If we fail to do so, it is likely that other technologies and companies will predominate and we will not be able to earn a sufficient return on our investment.

General economic conditions cause uncertainty with respect to other companies' and entities' collaborating with us or otherwise dealing with us, and this can have an adverse effect on our revenues and cash flows

To a large extent, decisions by businesses and other entities to collaborate or otherwise do business with us are discretionary, and the decision making process typically takes many months to complete. We believe that the prolonged slowdown in the U.S. and global economies has caused, and may continue to cause potential collaborators and customers to defer decisions to work with us or to access our technologies. As a result, we expect that revenues and cash flows will be uncertain for the next several quarters. Therefore, it is difficult to accurately assess and predict the future demand for our products, technologies and services. If these general economic conditions continue, such conditions will likely have a continuing, adverse effect on our revenues and operating results.

Alternative technologies may supersede our technologies or make them non-competitive

Genomics, proteomics, biomanufacturing and bioinformatics are intensely competitive fields. They are characterized by extensive research efforts, which result in rapid technological progress that can render existing technologies obsolete or economically noncompetitive. If our competitors succeed in developing products or technologies that are more effective than ours or that render our products or technologies obsolete or noncompetitive, our business will suffer. Many universities, public agencies and established pharmaceutical, biotechnology, chemical and other life sciences companies with substantially greater resources than we have are developing and using technologies and are actively engaging in the development of products similar to or competitive with our products and technologies. Like us, our competitors are using proteomics and genomics technologies to identify potential drug targets, therapeutic proteins and diagnostic marker proteins. In addition, our competitors have developed databases containing gene sequence, gene expression, genetic variation or other genomic information and are marketing or plan to market their data to pharmaceutical, biotechnology, chemical and other life sciences companies. To remain competitive, we must continue to invest in new and existing technologies, expand our databases and improve our bioinformatics software. We may not have the resources to continue such investment.

Our competitors may devise faster, more complete or more accurate methods to obtain proteomic and functional genomic information than our technologies and systems, including our ProGEx and GENEWARE systems. There has been and continues to be substantial academic and commercial research effort devoted to the development of such methods. If a successful competitive method is developed, it would undermine the commercial basis for the products and technologies we intend to provide.

We may not be able to enter into collaborations necessary to fully develop and commercialize our products and technologies, and we will be dependent on our collaborators if we do

We are independently pursuing some therapeutic product applications into the development stage. However, we expect to develop and commercialize most of our future products in collaboration with pharmaceutical and biotechnology companies. For example, in 2002 we changed our strategy concerning our NHL vaccine and are seeking to proceed with a partner to

complete the development of this product. We cannot assure you that such collaborative arrangements will be available to us on acceptable terms, or at all. If our cash flows continue to deteriorate or we take significant steps to reduce our expenses, potential partners may question our ability to perform and choose not to do business with us, which would make it harder for us to find a partner and would harm our ability to commercialize our products. Our success will depend in large part on our ability to enter into future collaborations with other companies for the financing of development and/or regulatory approval and commercialization of our products. Our reliance upon these companies for these capabilities will reduce our control over such activities and could make us dependent upon them. To date, we have entered into only a limited number of collaborations. Generally, the scope of these collaborations has been to demonstrate the function of plant genes and the feasibility of using viral vectors to create proteins in plants and to identify marker proteins for drug development and diagnostics. Our existing agreements provide us with rights to participate financially in the commercial development of products resulting from the use of our technologies. We may be unable to obtain such rights in future collaborations. In addition, unforeseen delays or complications could arise and result in the breach of our contractual obligations with our collaborators and others, or render our technologies unable to perform at the quality and capacity levels required for success.

Conflicts with collaborators or licensees could harm our business

Conflicts with collaborators could have a negative impact on our relationships with them, including on our revenues to be derived from certain of these relationships, and impair our ability to enter into future collaborations, either of which could adversely affect our business. Collaborators could develop competing products, preclude us from entering into collaborations with their competitors or terminate their agreements with us prematurely. Moreover, disagreements could arise with collaborators or licensees over rights to our intellectual property, our rights to share in any of the future revenues from products or technologies resulting from use of our technologies, our rights to payments for achievement of milestones or our performance of research and development activities on behalf of collaborators, or our activities in separate fields may conflict with other business plans of our collaborators or licensees.

We must enter into agreements with third parties to provide sales and marketing services, or develop these capabilities on our own, if we are to successfully commercialize our products and technologies

Although we plan to enter into sales and marketing arrangements with third parties, we may not be able to enter into these arrangements on favorable terms, if at all. If we cannot enter into these arrangements, we must develop a sales and marketing force with sufficient technical expertise to generate demand for our products and technologies. Our possible inability to develop or contract for effective sales and marketing capabilities would significantly impair our ability to develop and commercialize our products.

We may not be able to successfully manufacture products in commercial quantities or at acceptable costs

The failure of our technologies to provide safe, effective, useful or commercially viable approaches to the discovery and development of drug targets and proteins which can be used as therapeutics would significantly limit our business plan and future growth.

We may be unable to recruit and retain senior management and other key scientific personnel on whom we are dependent

The loss of one or more of our senior management or other key scientific personnel could significantly harm our business and could inhibit our research and development and commercialization efforts. None of our key personnel are subject to employment agreements. We face competition for research scientists and technical staff from other companies, academic institutions, government entities, nonprofit laboratories and other organizations. We have implemented 10% cash salary reductions substituting non-cash stock compensation for over twenty of our highest paid employees to conserve cash. Failure to recruit and retain senior management and scientific personnel on acceptable terms may prevent us from achieving our business objectives.

Concentration of ownership among our existing executive officers, directors and principal stockholders may enable them to collectively influence significant corporate transactions that require stockholder approval

Our directors, our executive officers and principal stockholders affiliated with our directors and our executive officers beneficially own, in the aggregate, approximately 28% of our outstanding common stock as of March 20, 2003. The concentration of ownership in combination with other common stockholders may collectively influence significant corporate transactions such as mergers, changes in control, consolidation or sale of some or all of our assets, and other significant corporate transactions requiring stockholder approval.

Our stockholder rights plan and provisions of our charter documents and Delaware law may inhibit a takeover, which could adversely affect our stock price

We have adopted a stockholder rights plan and declared a dividend distribution of one right for each outstanding share of common stock to stockholders of record as of May 4, 2001. Subject to certain specified exceptions and limitations under the rights plan, we will continue to issue one right for each share of common stock that becomes outstanding after May 4, 2001. Each right entitles the holder to purchase one unit consisting of one one-hundredth of a share of our Series A Junior Participating Preferred Stock for $45 per unit. Under certain circumstances, if a person or group acquires 15% or more of our outstanding shares of common stock, holders of the rights (other than the person or group causing their exercisability) will be able to purchase, in exchange for the $45 exercise price, shares of our common stock or of any company into which we are merged having a value of $90. In addition, the board of directors has the option, under certain circumstances, to exchange each right (other than rights held by the person or group triggering the board of directors' option) for a share of common stock for no additional consideration on the part of the holder of the right. The rights expire on April 27, 2011. Our rights plan could make it more difficult for a third party to acquire us (or a significant percentage of our outstanding capital stock) by causing substantial dilution of the stock ownership of a person or group attempting to acquire control of us. Our rights plan may have the effect of discouraging takeover attempts because a potential acquirer would have to negotiate with our board of directors to avoid suffering dilution.

Provisions in our charter and bylaws and applicable provisions of the Delaware General Corporation Law may also make it more difficult for a third party to acquire control of us without the approval of our board of directors. These provisions may make it more difficult or expensive for a third party to acquire a majority of our common stock or delay, prevent or deter a merger, acquisition, tender offer or proxy contest, which may adversely affect our stock price.

Risks Related to Our Industry

If companies in the pharmaceutical, biotechnology, agricultural, chemical and life sciences industries do not succeed or their demand for our products and technologies decreases, then our revenues could be reduced

We expect to derive our revenues primarily from products and technologies provided to the pharmaceutical, biotechnology, agricultural, chemical and life sciences industries. Accordingly, our success will depend directly on the success of companies in these industries and their demand for our products, services and technologies. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by companies in those industries, or their unwillingness or inability to use our products and technologies. These reductions and delays may result from factors that are not within our control, such as:

- changes in economic conditions generally;
- the extent to which companies in these industries conduct research and development involving proteomics and functional genomics in-house or through industry consortia;
- the extent to which genomic information is or is not made publicly available;
- consolidation within one or more of these industries;
- changes in the regulatory environment affecting these industries;
- pricing pressures;
- market-driven pressures on companies to consolidate and reduce costs; and/or
- other factors affecting research and development spending in these industries.

If competitive products are better than our products, then our business may fail

The markets for protein development and production, including human and veterinary therapeutics and vaccines such as the ones we are developing, are highly competitive. We face significant competition in our protein product development and production efforts from entities using alternative, and in some cases higher volume and larger scale, approaches for the same purpose. Competitors with substantially greater resources are actively developing products similar to or competitive with our products and potential products. Our competitors may succeed in developing products or obtaining regulatory approval before we do or in developing products that are more effective than those we develop or propose to develop. A large number of universities and other not-for-profit institutions, many of which are funded by the U.S. and foreign governments, are also conducting research to discover genes and their functions. Any one or more of these entities may discover and establish a patent position in one or more of the genes or proteins that we wish to commercialize.

In addition, several pharmaceutical, biotechnology, chemical and other life sciences companies engage in research and development in the use of unique gene expression systems to produce therapeutic proteins. These competitors may develop products earlier or obtain regulatory approvals faster than we may be able to, or develop products that are more effective than ours. New developments are expected to continue, and discoveries by others may render our products and technologies noncompetitive, which could lead to the failure of our business.

We and our collaborators may not obtain FDA and other approvals for our products in a timely manner, or at all

Drugs and diagnostic products are subject to an extensive and uncertain regulatory approval process by the FDA and comparable agencies in other countries. The regulation of new products is extensive, and the required process of laboratory testing and human studies is lengthy, expensive and uncertain. The burden of these regulations will fall on us to the extent we are developing proprietary products. We may not be able to obtain the clearances and approvals necessary for the clinical testing, field-testing, manufacturing or marketing of our products. If the products are the result of a collaborative effort, these burdens may fall on our collaborators or we may share these burdens with them. We may not obtain FDA or other approvals for those products in a timely manner, or at all. We may encounter significant delays or excessive costs in our efforts to secure necessary approvals or licenses. Even if we obtain FDA regulatory approvals, the FDA extensively regulates manufacturing, labeling, marketing, promotion and advertising after product approval. Further, once a manufacturer obtains regulatory approval, a marketed product and its manufacturer are subject to continual review, and discovery of previously unknown problems with a product or manufacturer may result in restrictions on the product, manufacturer or manufacturing facility, including withdrawal of the product from the market. In some countries, regulatory agencies also set or approve the sale prices for drug products. Additionally, several of our product development areas may involve relatively new technology that has not been the subject of extensive product testing in humans. The regulatory requirements governing these products and related clinical procedures remain uncertain and the products themselves may be subject to substantial review by the FDA and foreign governmental regulatory authorities that could prevent or delay approval. Regulatory requirements ultimately imposed on our products could limit our ability to test, manufacture and commercialize our products.

If new rules issued by the USDA adversely affect us or our collaborators' ability to commercialize genetically modified products, then our ability to sell certain products and technologies will be severely impaired

We must comply with USDA regulations for outdoor releases of genetically engineered organisms as well as other products designed for use on or with agricultural products. The USDA has released regulations that prohibit the inclusion of genetically modified ingredients in products labeled as organic. The USDA regulations also prohibit the use of genetically modified fibers in clothing labeled as organic. These regulations ultimately could make any products that may be developed with our collaborators, including Dow, unattractive to or too expensive for consumers, or could cause the government to prohibit their sale or use. In addition, the USDA prohibits growing and transporting genetically modified plants except pursuant to an exemption or under special permits. We may use genetically modified plants as screening or production hosts. Changes in USDA policy regarding the movement or field release of genetically modified plant hosts could adversely affect our business by increasing the cost of our products and technologies or decreasing consumer demand for those products and technologies or causing the government to prohibit their sale or use.

If there is negative public reaction to the use of genetically engineered products and technologies, then the market for certain products and technologies we develop will be adversely affected

Future commercial success of some of our products and of the products of some of our collaborators, will depend in part on public acceptance of the use of genetically engineered products including drugs, plants and plant products. Claims that genetically engineered products

are unsafe for consumption or pose a danger to the environment may influence public attitudes. Negative public reaction to genetically modified organisms and products could result in greater government regulation of genetic research and resultant products, including stricter labeling requirements, and could cause a decrease in the demand for our products, even if such products do not result from GMO organisms.

We may be sued for product liability and our product liability insurance may not be adequate

The testing, marketing and sale of our and our collaborators' products will entail a risk of allegations of product liability, and third parties may assert substantial product liability claims against us. While we have limited product liability insurance to protect against this risk, adequate insurance coverage may not be available at an acceptable cost, if at all, in the future and a product liability claim or product recall could materially and adversely affect our business. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of the products we or our collaborators develop. If we are sued for any injury allegedly caused by our products or our collaborators' products, our liability could exceed our total assets and our ability to pay the liability.

If we use hazardous materials in our business in a manner that causes injury or violates laws, we may be liable for substantial damages

Our research and development processes involve the use of hazardous materials, including chemicals and radioactive and biological materials. Our operations also produce hazardous waste products. The chemicals we use include, but are not limited to, flammable solvents such as methanol and ethanol, ethidium dye which is a commonly used fluorescent dye for visualizing DNA, and buffer solutions used in the purification of DNA, and various organic solvents, acids and bases. We also use several radioisotopes including phosphorous-32, carbon-14, sulfur-35, phosphorous-33, iodine-125 and hydrogen-3. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from these materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of these materials. We could be subject to civil damages and criminal penalties in the event of an improper or unauthorized release of, or exposure of individuals to, hazardous materials. Further, it is possible that the materials we use could contaminate another party's property. In addition, claimants may sue us for injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed our total assets and our ability to pay the liability. In addition, compliance with environmental laws and regulations is expensive, and current or future environmental regulations may impair our research and development and production efforts. Although we have general liability insurance, these policies do not cover claims arising from pollution from chemical, radioactive or biological materials. Our collaborators may also be working with various types of hazardous materials in connection with our collaborations. In the event of a lawsuit or investigation, we could be held responsible for any injury we or our collaborators cause to persons or property by exposure to, or release of, any hazardous materials.

Healthcare reform and restrictions on reimbursements may limit the financial returns from our products

Our ability and that of our collaborators to commercialize therapeutics and diagnostic products may depend in part on the extent to which government health administration authorities, private health insurers and other organizations will pay the cost of these products. These third parties are increasingly challenging both the need for and the price of new medical

products and services. Significant uncertainty exists as to the reimbursement status of newly approved therapeutics and diagnostics, and adequate third party reimbursement may not be available for any product to enable us to maintain price levels sufficient to realize an appropriate return on our investment in research and product development.

Risks Related to Our Intellectual Property

Patent protection in the biotechnology industry is uncertain, which may result in a decrease in the value of our products and technologies

We are involved in overlapping and rapidly evolving areas of biotechnology, pharmaceutical development and basic research involving viral vectors, plant transgenics, proteomics, functional genomics, protein transformation, and immunotherapy. Each of these areas has been the subject of intense research and patenting activity throughout the world by our commercial competitors, actual and potential collaborators, academic institutions and government researchers. We cannot determine whether or not there are patents currently pending that, if issued, would prevent us from practicing our core technologies, commercializing them or developing commercially viable products based upon them.

The patent positions of biotechnology firms generally are highly uncertain and involve complex legal and factual questions that will determine who has the right to develop a particular product. Changes in, or different interpretations of, patent laws in the United States and other countries might allow others to use our discoveries or to develop and commercialize products and technologies similar to our products and technologies without any compensation to us. Our potential collaborators or customers may conclude that uncertainties about patent protection decrease the value of our databases, products and services.

Throughout the world there are numerous issued patents, as well as published foreign patent applications which may issue as patents, many of which relate to our current operations, our anticipated future operations and the products we are likely to develop. The scope of these patents is a matter of legal interpretation and is subject to uncertainty. We have not obtained, but we may in the future obtain, opinions from our patent counsel that we have freedom to conduct our commercial activities free of claims of patent infringement from third parties. For example, we are aware of one company, Enzon, Inc., that through its subsidiary, SCA Ventures, Inc., owns or has licensed a broad portfolio of patents to single-chain antigen binding proteins. Enzon, in a letter mailed to numerous companies including us, has stated that it would like to discuss providing a license under these patents. In addition, Dow owns or controls certain patent rights in the field of viral vectors covering the infection of plant cells and the expression of foreign genes in plant cells, and has informed us that it believes that some of our plant viral activities may fall within the scope of its patents. Two patents issued to us in October 2001 reference the Dow-controlled patents and conclude that they do not constitute prior art. If we are unable to resolve this matter, and are found to have infringed upon Dow's rights, our product development and research activities related to plant viruses which fall within the scope of Dow's patents may be delayed or terminated. These kinds of disagreements could result in costly and time-consuming litigation and divert our financial and managerial resources. Epicyte Pharmaceuticals, Inc., in a letter mailed to several companies, invited us to participate in a licensing program under their patent for marking immunoglobulins in plants. Maxygen, Inc. sent us a cautionary letter regarding our GRAMMR™ molecular evolution technology. Maxygen owns several patents to its own proprietary methods. We are not aware of any overlap between our activities and the Maxygen patents. If it turns out that we require a license from either of these companies, it would increase the cost of doing business in these areas. If a dispute should arise between LSBC and either of these companies, it could result in delay or termination of these activities.

Our patent applications may not result in issued patents that are enforceable

Our disclosures in our patent applications may not be sufficient to meet the statutory requirements for patentability in all cases. As a result, we do not know which of our patent applications will result in enforceable patents. Our patent applications may not issue as patents, and any patents that are issued to us may not provide commercially meaningful protection against competitors. Any issued patent may not provide us with competitive advantages. Others may challenge our patents or independently develop similar products which could result in an interference proceeding in the U.S. Patent and Trademark Office. Others may be able to design around our issued patents or develop products similar to our products. In addition, others may discover uses for genes or proteins other than those uses covered in our patents, and these other uses may be separately patentable.

Public disclosure and patents relating to genes and gene sequences held by others may limit our proprietary rights

The Human Genome Project and many companies and institutions have identified genes and deposited those sequences in public databases and are continuing to do so. These public disclosures might limit the scope of our claims or make unpatentable subsequent patent applications on full-length gene sequences. We are aware of issued patents and patent applications containing subject matter such that we or our licensees or collaborators may require a license or rights in order to research, develop or commercialize some of our products and technologies. We may find that licenses relating to such subject matter will not be available on acceptable terms, or at all.

Patent infringement or enforcement litigation or interference proceedings could be costly and disrupt our business and may prevent us from commercializing our products

The technology that we use to develop our products and key resources, and those that we incorporate in our products and technologies, may be subject to claims by third parties, including our collaborators, that they infringe the patents or proprietary rights of others. Technologies of our collaborators may also be subject to infringement or similar claims which could impair our collaborative product development and commercialization efforts. We also may need to enforce our patent rights in actions against others, which could be expensive. The risk of such events occurring will tend to increase as the fields of proteomics, genomics and the biotechnology industry expand, more patents are issued and other companies attempt to discover genes and proteins and engage in other proteomics, genomics and biotechnology-related businesses.

With respect to identifying proteins uniquely associated with disease states or as targets for drug therapy, we are aware that companies have published patent applications relating to nucleic acids encoding specific proteins. If the U.S. Patent and Trademark Office issues patents to these companies, their patents may limit our ability and the ability of our collaborators to practice under any patents that may be issued to us. Also, even if the U.S. Patent and Trademark office issues us a patent, the scope of coverage or protection afforded to the patent may be limited.

We may not be able to protect our know-how and trade secrets

We generally control the disclosure and use of our know-how and trade secrets using confidentiality agreements. It is possible, however, that:

- Some or all confidentiality agreements will not be honored;
- Third parties will independently develop equivalent technology;

- Disputes might arise with our consultants, collaborators or others concerning the ownership of intellectual property; and/or
- Unauthorized disclosure of our know-how or trade secrets will occur

Item 7A. Quantitative and Qualitative Disclosure About Market Risk

Interest rate risk

The Company's exposure to market risk for changes in interest rates relates primarily to the Company's investment portfolio. The Company's investments consist of money market funds, commercial paper, corporate and U.S. government agency notes, and bank certificates of deposit. The Company does not invest in derivative instruments. The Company mitigates its risk of principle loss by investing only in securities of high quality issuers with maturities of less than one year and limiting the amount of credit exposure to any one issuer.

The table below presents the amortized principal amount, weighted average interest rates and maturities for the Company's investment portfolio at December 31, 2002. The amortized principal amount approximates fair value at December 31, 2002. If market interest rates were to change immediately and uniformly by 10% from levels at December 31, 2002, the fair value of the Company's investments would change by an immaterial amount.

	Amortized Principal Amount	Weighted Average Interest Rate
Cash and cash equivalents	$ 8,238,000	1.68%
Marketable securities (0-1 year)	14,840,000	3.65%

Foreign currency

The Company has minimal transactions in foreign currencies and has not had any material exposure to foreign currency rate fluctuations relating to assets or liabilities.

Item 8. Financial Statements and Supplementary Data

The financial statements and supplementary data required by this Item 8 are included in Part IV of this Report.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

PART III

Item 10. Directors and Executive Officers of the Registrant

Directors

Information with respect to directors may be found in the section captioned "Proposal No. 1: Election of Directors" appearing in the definitive proxy statement to be delivered to stockholders in connection with the 2003 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

Executive Officers

Information with respect to executive officers may be found in the section captioned "Executive Officers" appearing in the definitive proxy statement to be delivered to stockholders in connection with the 2003 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

Section 16(a) Compliance

Information about compliance with Section 16(a) of the Securities and Exchange Act of 1934 that is required by this Item may be found in the section captioned "Compliance Under Section 16(a) of the Securities Exchange Act of 1934" appearing in the definitive proxy statement to be delivered to stockholders in connection with the 2003 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

Item 11. Executive Compensation

Information with respect to executive compensation may be found in the section captioned "Executive Compensation and Related Information" appearing in the definitive proxy statement to be delivered to stockholders in connection with the 2003 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information with respect to security ownership of certain beneficial owners and management may be found in the section captioned "Security Ownership of Certain Beneficial Owners and Management" appearing in the definitive proxy statement to be delivered to stockholders in connection with the 2003 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

Information with respect to compensation plans under which shares of our common stock may be issued may be found in the section captioned "Equity Compensation Plans Information" appearing in the definitive proxy statement to be delivered to stockholders in connection with the 2003 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions

Information with respect to certain relationships and related transactions may be found in the section captioned "Certain Relationships and Related Transactions" appearing in the definitive proxy statement to be delivered to stockholders in connection with the 2003 Annual Meeting of Stockholders. Such information is incorporated herein by reference.

Item 14. Controls and procedures

(a) Evaluation of disclosure controls and procedures. Regulations under the Securities Exchange Act of 1934 require public companies, including our company, to maintain "disclosure controls and procedures," which are defined to mean a company's controls and other procedures that are designed to ensure that information required to be disclosed in the reports that it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission's rules and forms. Our chief executive officer and our chief financial officer, based upon their evaluation of our disclosure controls and procedures within 90 days before the filing date of this report, concluded that as of their evaluation date, our disclosure controls and procedures were effective for this purpose.

(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 our chief executive officer and chief financial officer carried out their evaluation as referenced in the above paragraph.

PART IV

Item 15. Exhibits, Financial Statement Schedules and Reports on Form 8-K

Financial Statements

The following financial statements are included herein:

Financial Statement Schedules

See index above

Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Date	Number	
3.1	Amended and Restated Certificate of Incorporation.	S-1	08/09/00	3.1	
3.2	Amended and Restated Bylaws, as amended on July 20, 2001.	10-Q	11/13/01	3.1	
3.3	Certificate of Designations specifying the terms of the Series A Junior Participating Preferred Stock of Registrant, as filed with the Secretary of State of the State of Delaware on May 4, 2001.	8-A	05/04/01	3.2	
4.1	Form of registrant's Specimen Common Stock Certificate.	S-1	08/09/00	4.1	
4.2	Information and Registration Rights Agreement dated October 11, 1990 by and among the registrant and the parties who are signatories thereto.	S-1	08/09/00	4.2	
4.3	Amendment to the Information and Registration Rights Agreement dated October 10, 1991 by and among the registrant and the parties who are signatories thereto.	S-1	08/09/00	4.3	
4.4	Second amendment to the Information and Registration Rights Agreement dated October 10, 1991 by and among the registrant and the parties who are signatories thereto.	S-1	08/09/00	4.4	

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Date	Number	
4.5	Third Amendment to the Information and Registration Rights Agreement dated March 20, 1998 by and among the registrant and the parties who are signatories thereto.	S-1	08/09/00	4.5	
4.6	Fourth Amendment to the Information and Registration Rights Agreement dated September 1, 1998 by and among the registrant and the parties who are signatories thereto.	S-1	08/09/00	4.6	
4.7	Warrant to purchase 1,848,091 shares of common stock dated September 1, 1998, by and between the registrant and The Dow Chemical Company.	S-1	08/09/00	4.10	
4.8	Warrant Agreement to purchase 1,848,091 shares of common stock dated September 1, 1998, by and between the registrant and The Dow Chemical Company.	S-1	08/09/00	4.11	
4.9	Warrant to purchase 21,991 shares of common stock dated January 29, 1988, assigned by the registrant on January 14, 2000 to Arnold Zimmerman.	S-1	08/09/00	4.12	
4.10	Warrant to purchase 21,991 shares of common stock dated January 29, 1988 assigned by the registrant on January 29, 2000 to Sebastian J. Trusso.	S-1	08/09/00	4.13	
4.11	Warrant Agreement to purchase 21,991 shares of common stock assigned by the registrant to Arnold Zimmerman.	S-1	08/09/00	4.14	
4.12	Warrant Agreement to purchase 21,991 shares of common stock assigned by the registrant to Sebastian J. Trusso.	S-1	08/09/00	4.15	
4.13	Rights Agreement dated April 27, 2001 between registrant and Equiserve Trust Company, as Rights Agent, which includes as Exhibit A the form of Certificate of Designations of Series A Junior Participating Preferred Stock, as Exhibit B the Form of Rights Certificate and as Exhibit C the Summary of Rights to Purchase Preferred Shares.	8-A	05/04/01	4.1	
10.1*	Registrant's 2000 Stock Incentive Plan.	S-1	08/09/00	10.2	
10.2*	Registrant's 2000 Employee Stock Purchase Plan.	S-1	08/09/00	10.3	
10.3*	Form of registrant's Directors' and Officers' Indemnification Agreement.	S-1	08/09/00	10.4	
10.4	Dow Collaboration and License Agreement dated August 24, 1998, by and among the registrant and The Dow Chemical Company and its subsidiary Dow AgroSciences LLC.	S-1	08/09/00	10.5	

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form	Date	Number	
10.6	Lease Agreement dated October 15, 1987, and amendments 1 through 8 thereto between the registrant and Mission Vacaville Limited partnership.	S-1	08/09/00	10.9	
10.8	Ninth Amendment to Lease Agreement between registrant and Mission Vacaville Limited partnership, dated July 31, 2000.	10-K	04/02/01	10.11	
10.9	Tenth Amendment to Lease Agreement between registrant and Woodlawn Foundation (successor-in-interest to Mission Vacaville Limited partnership), March 1, 2001.	10-K	04/02/01	10.12	
10.10	Lease Agreement dated July 26, 2000 between Large Scale Proteomics Corporation and Westphalia Center II Limited partnership.	10-K	04/02/01	10.13	
10.11*	Letter Agreement between registrant and John D. Fowler, Jr.	10-K	04/01/02	10.14	
10.12*	Stock Purchase Subscription Agreement between registrant and John D. Fowler, Jr.	10-K	04/01/02	10.15	
10.13*	Warrant to Purchase Common Stock between registrant and John D. Fowler, Jr.	10-K	04/01/02	10.16	
10.14*	Stock Issuance Agreement between registrant and John D. Fowler, Jr.	10-K	04/01/02	10.17	
10.15*	Letter Agreement between registrant and Ronald J. Artale.	10-K	04/01/02	10.18	
10.16	Form of Stock Issuance Agreement Under the 2000 Stock Incentive Plan.	10-Q	11/14/02	10.01	
21.1	Large Scale Biology Corporation Subsidiaries.	10-K	04/01/02	21.1	
23.1	Independent Auditors' Consent.				X

* Management contract or compensatory plan or arrangement filed as exhibits pursuant to Items 14(a) and 14(c) of Form 10-K.

Reports on Form 8-K

The registrant did not file any reports on Form 8-K in the fourth quarter of 2002.

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Stockholders
of Large Scale Biology Corporation

We have audited the accompanying consolidated balance sheets of Large Scale Biology Corporation and its subsidiaries (collectively the "Company") as of December 31, 2002 and 2001, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2002. 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 in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Large Scale Biology Corporation and its subsidiaries as of December 31, 2002 and 2001, and the results of their operations and their 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.

As discussed in Note 5 to the consolidated financial statements, in 2002 the Company changed its method of accounting for goodwill and other intangible assets to conform to Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets."

/s/ DELOITTE & TOUCHE LLP

Deloitte & Touche LLP
Sacramento, California

January 23, 2003

LARGE SCALE BIOLOGY CORPORATION

CONSOLIDATED BALANCE SHEETS

	December 31, 2002	December 31, 2001
ASSETS		
Current assets:		
Cash and cash equivalents	$ 8,238,000	$ 24,055,000
Marketable securities	14,840,000	24,724,000
Prepaid expenses and other current assets	1,529,000	1,217,000
Total current assets	24,607,000	49,996,000
Property, plant and equipment, net	14,865,000	18,882,000
Patents and intellectual property licenses, net	4,434,000	5,233,000
Goodwill, net	—	839,000
Other intangible assets, net	52,000	893,000
Other assets	783,000	1,069,000
	$ 44,741,000	$ 76,912,000
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 956,000	$ 1,816,000
Accrued expenses	571,000	1,105,000
Current portion of long-term debt	145,000	107,000
Deferred revenue and customer advances	245,000	278,000
Total current liabilities	1,917,000	3,306,000
Long-term debt	165,000	249,000
Long-term deferred revenue	—	320,000
Total liabilities	2,082,000	3,875,000
Commitments (Note 9)		
Stockholders' equity:		
Common stock, par value $.001 per share; 60,000,000 shares authorized; 25,223,753 and 24,892,989 shares issued and outstanding at December 31, 2002 and 2001, respectively	192,160,000	191,901,000
Stockholders' notes receivable	(46,000)	(50,000)
Deferred compensation	(550,000)	(3,093,000)
Accumulated deficit	(148,905,000)	(115,721,000)
Total stockholders' equity	42,659,000	73,037,000
	$ 44,741,000	$ 76,912,000

See accompanying notes to consolidated financial statements.

LARGE SCALE BIOLOGY CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2002	2001	2000
Revenues	$ 2,622,000	$ 17,731,000	$ 23,291,000
Costs and expenses:			
Development agreements	1,247,000	3,467,000	8,115,000
Research and development	21,191,000	22,391,000	16,373,000
General and administrative	12,595,000	14,373,000	8,119,000
Impairment of goodwill	839,000	—	—
Stock compensation bonus	—	—	7,268,000
Amortization of goodwill and purchased intangibles	624,000	1,300,000	1,197,000
Total costs and expenses	36,496,000	41,531,000	41,072,000
Loss from operations	(33,874,000)	(23,800,000)	(17,781,000)
Other income (expense):			
Interest income	707,000	3,200,000	2,638,000
Interest expense	(17,000)	(89,000)	(346,000)
Change in fair value of warrant	—	—	(811,000)
Total other income, net	690,000	3,111,000	1,481,000
Loss before provision for income taxes	(33,184,000)	(20,689,000)	(16,300,000)
Provision for income taxes	—	—	—
Net loss	$(33,184,000)	$(20,689,000)	$(16,300,000)
Net loss per share—basic and diluted	$ (1.33)	$ (0.84)	$ (1.07)
Weighted average shares outstanding—basic and diluted	24,991,201	24,599,126	15,251,575

See accompanying notes to consolidated financial statements.

LARGE SCALE BIOLOGY CORPORATION

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Number of Shares		Amount					
	Convertible Preferred Stock	Common Stock	Convertible Preferred Stock	Common Stock	Stockholders' Notes Receivable	Deferred Compensation	Accumulated Deficit	Total Stockholders' Equity
Balances, December 31, 1999	5,605,813	9,300,684	40,497,000	$ 39,469,000	$(112,000)	$(7,825,000)	$ (78,732,000)	$ (6,703,000)
Issuance of common stock		5,750,000		88,756,000				88,756,000
Conversion of convertible preferred stock into common stock	(5,605,813)	8,441,415	(40,497,000)	40,497,000				—
Reclassification of warrant liability to stockholders' equity				12,191,000				12,191,000
Exercise of stock options		952,726		1,786,000				1,786,000
Issuance of common stock for notes receivable		1,500		10,000	(10,000)			—
Payment on notes receivable					57,000			57,000
Stock compensation bonus				7,268,000				7,268,000
Charge for common stock options issued to non-employees				120,000				120,000
Amortization of deferred compensation						2,617,000		2,617,000
Net loss							(16,300,000)	(16,300,000)
Balances, December 31, 2000	—	24,446,325	—	190,097,000	(65,000)	(5,208,000)	(95,032,000)	89,792,000
Issuance of common stock		100,000		345,000				345,000
Issuance of common stock by Employee Stock Purchase Plan		48,433		389,000				389,000
Issuance of common stock for services		1,065		7,000				7,000
Exercise of stock options		97,166		186,000				186,000
Common stock granted to an employee		200,000		690,000		(690,000)		—
Charge for common stock options issued to non-employees				187,000				187,000
Payments on notes receivable					15,000			15,000
Amortization of deferred compensation						2,805,000		2,805,000
Net loss							(20,689,000)	(20,689,000)
Balances, December 31, 2001	—	24,892,989	—	191,901,000	(50,000)	(3,093,000)	(115,721,000)	73,037,000
Issuance of common stock by Employee Stock Purchase Plan		61,756		135,000				135,000
Issuance of common stock for services		17,162		31,000				31,000
Exercise of stock options		67,969		5,000				5,000
Common stock awarded to employees		226,003		245,000		(245,000)		—
Common stock reverted to the company		(42,126)		(145,000)		145,000		—
Credit for common stock options issued to non-employees				(12,000)				(12,000)
Payments on notes receivable					4,000			4,000
Amortization of deferred compensation						2,643,000		2,643,000
Net loss							(33,184,000)	(33,184,000)
Balances, December 31, 2002	—	25,223,753	—	$192,160,000	$ (46,000)	$ (550,000)	$(148,905,000)	$42,659,000

See accompanying notes to consolidated financial statements.

LARGE SCALE BIOLOGY CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2002	2001	2000
Cash flows from operating activities:			
Net loss	$(33,184,000)	$(20,689,000)	$(16,300,000)
Reconciliation of net loss to net cash used in operating activities:			
Depreciation of property, plant and equipment	4,074,000	4,070,000	3,452,000
Amortization of intangible assets	1,888,000	1,822,000	1,410,000
Stock compensation expense	2,662,000	2,992,000	2,737,000
Impairment of goodwill	839,000	—	—
Write-down of property, plant and equipment	433,000	—	—
Write-off of capitalized patent costs	396,000	—	32,000
Interest received (accrued) in excess of interest accrued (received)	278,000	802,000	(800,000)
Issuance of common stock for services	—	7,000	—
Stock compensation bonus	—	—	7,268,000
Change in fair value of warrants	—	—	811,000
Changes in assets and liabilities:			
Prepaid expenses and other current assets	38,000	510,000	(833,000)
Other assets	143,000	207,000	(281,000)
Accounts payable	(747,000)	(118,000)	386,000
Accrued expenses	(399,000)	691,000	(452,000)
Deferred revenue and customer advances	(353,000)	(8,745,000)	(10,427,000)
Total adjustments	9,252,000	2,238,000	3,303,000
Net cash used in operating activities	(23,932,000)	(18,451,000)	(12,997,000)
Cash flows from investing activities:			
Purchases of marketable securities	(22,681,000)	(60,455,000)	(48,149,000)
Proceeds from matured marketable securities	32,287,000	79,900,000	11,102,000
Capital expenditures	(968,000)	(12,281,000)	(4,489,000)
Increase in patents and intellectual property licenses	(629,000)	(3,773,000)	(753,000)
Proceeds from employee loan payments	—	—	27,000
Exercise of call option	—	—	(74,000)
Net cash provided by (used in) investing activities	8,009,000	3,391,000	(42,336,000)
Cash flows from financing activities:			
Proceeds from issuance of common stock	5,000	531,000	90,542,000
Proceeds from issuance of long-term debt	—	—	744,000
Proceeds from stockholder loan payments	4,000	15,000	57,000
Change in restricted cash	143,000	654,000	(41,000)
Principal payments on long-term debt	(46,000)	(2,115,000)	(2,914,000)
Net cash provided by (used in) financing activities	106,000	(915,000)	88,388,000
Net increase (decrease) in cash and cash equivalents	(15,817,000)	(15,975,000)	33,055,000
Cash and cash equivalents at beginning of year	24,055,000	40,030,000	6,975,000
Cash and cash equivalents at end of year	$ 8,238,000	$ 24,055,000	$ 40,030,000

See accompanying notes to consolidated financial statements.

LARGE SCALE BIOLOGY CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. The Company and Summary of Significant Accounting Policies

Large Scale Biology Corporation and its subsidiaries (collectively, the "Company", "we" or "our") is a research and development company. The Company's goal is to apply its proprietary proteomics, functional genomics, and biomanufacturing technologies to develop and manufacture drugs and vaccines for effective treatment of diseases. The Company's proprietary systems are supported by patents and patent applications. The Company's corporate office and genomics research facility are located in Vacaville, California. The Company's biomanufacturing plant is located in Owensboro, Kentucky, and the Company's proteomics research facility is located in Germantown, Maryland.

The Company acquired 92.5% of Large Scale Proteomics Corporation ("Proteomics") in February 1999 and the remaining 7.5% in March 2000 (see Note 2).

In the quarter ended September 30, 2000, the Company received $88.8 million of net proceeds from the initial public offering (IPO) of the Company's common stock (see Note 3).

The Company incurred net losses of $33,184,000, $20,689,000 and $16,300,000 and negative operating cash flows of $23,932,000, $18,451,000 and $12,997,000 in the years ended December 31, 2002, 2001 and 2000, respectively. These negative cash flows were financed primarily by proceeds from the Company's IPO. If we are unable to generate significant revenues in 2003 or generate other potential sources of working capital including partnerships, mergers or sales of assets or technologies, the Company's operations may be adversely affected.

Reincorporation and Stock Conversion—On August 8, 2000, the Company reincorporated from a California corporation to a Delaware corporation. In connection with the reincorporation, each share of the Company's common and preferred stocks were converted into 1.5 shares of common stock of the Delaware corporation (see Note 3). All share and per share amounts in the accompanying consolidated financial statements have been restated to give effect to the stock conversion.

Basis of Consolidation—The accompanying consolidated financial statements include the accounts of Large Scale Biology Corporation and its subsidiaries. All intercompany balances and transactions have been eliminated.

Segment Reporting—The Company operates in one reportable segment.

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

Cash and Cash Equivalents—We consider all highly liquid investments with original maturities of three months or less to be cash equivalents.

Marketable Securities—Marketable securities at December 31, 2002 and 2001 consist of commercial paper, corporate and U.S. government agency notes, and bank certificates of deposit

all maturing within one year and are classified as held-to-maturity. The amortized cost of marketable securities at December 31, 2002 and 2001 approximates fair value. There were no significant holding gains or losses for any of the periods shown.

Concentrations of Credit Risk—Revenues from one and three customers represented 31% and 60%, respectively, of our total revenues in 2002. Revenue from one customer represented 85% and 86% of our total revenues in 2001 and 2000, respectively. The Company's cash and cash equivalents, marketable securities and accounts receivable are monitored for exposure to concentrations of credit risk. Cash equivalents and marketable securities consist of high quality credit instruments and management regularly monitors their composition and maturities. Substantially all of the Company's accounts receivable are derived from revenue earned from customers located within the United States. Management monitors the amount of credit exposure related to accounts receivable on an ongoing basis and generally requires no collateral from customers. We maintain allowances for estimated probable losses, when applicable. During the three year period ended December 31, 2002, we did not record any allowances for accounts receivable losses or write-offs of accounts receivable.

Fair value of Financial Instruments—The carrying amount of cash and cash equivalents, marketable securities, accounts receivable and accounts payable approximate fair value because of the short-term nature of these instruments. The fair value of debt is based upon current interest rates for debt instruments with comparable maturities and characteristics and approximates the carrying amount.

Property, Plant and Equipment—Property, plant and equipment is stated at cost. Depreciation is computed on a straight-line basis over the estimated useful lives of the assets, which are 3 to 10 years for machinery and equipment, the lease term for leasehold improvements, and 30 years for buildings.

Computer Software—Software developed for internal research and development activities is expensed as incurred.

Intangible Assets—Our policies with respect to intangible assets are as follows:

- *Patents*—The legal costs of filing patent applications are capitalized if they relate to commercially viable technologies. Commercially viable technologies are those technologies that are projected to generate future positive cash flows in the near term. Legal costs associated with patents applications that are not determined to be commercially viable are expensed as incurred. Once patents are issued, capitalized costs are amortized over the shorter of the patent's statutory or estimated economic life, ranging from 5 to 17 years as of December 31, 2002.
- *Intellectual Property Licenses*—The Company pays license fees to individuals or other companies under licensing agreements. These agreements provide the Company with exclusive or non-exclusive rights to use specified technologies during the license periods. License fees are capitalized if the agreements relate to commercially viable technologies. Capitalized license fees are amortized over the estimated economic life of the specified technology, ranging from 2 to 5 years as of December 31, 2002.
- *Core Technology*—Core technology is an intangible assets related to the Company's acquisition of Proteomics (see Note 2). Core technology is being amortized through January 2003.

Impairment of Long Lived Assets—The Company's long-lived assets include capitalized patents and intellectual property licenses and property and equipment related to our facilities in California and Maryland and our biomanufacturing plant in Kentucky. We evaluate our long-lived assets for impairment in accordance with Statement of Financial Accounting Standard ("SFAS") No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. If any of our long-lived assets are considered to be impaired, the amount of impairment to be recognized is equal to the excess of the carrying amount of the assets over the fair value of the assets (see Notes 4 and 5).

Revenue Recognition—We earn revenues from several sources including: 1) research and collaboration agreements and government grants that consist of one or more revenue sources including technology access fees, milestone payments and research funding; 2) license fees; and 3) royalties. We recognize revenues for each of these components as follows:

Technology access fees are typically up-front, non-refundable payments and represent consideration from our collaboration partners for access and rights to the Company's technologies for the term of the research agreement. The Company's technologies are normally integral to the objectives of the research collaboration and, therefore, receipt of a technology access fee does not represent the culmination of an earnings process. Accordingly, we recognize revenue from technology access fees on a straight-line basis over the original term of the agreement, not including renewal periods unless renewal is assured at the time the agreement is executed. The unrecognized portion of technology access fees is reported as deferred revenue.

Milestone payments are triggered by the Company's achievement of performance objectives that are defined in research agreements. Milestone achievements typically require acceptance or approval by our collaboration partners. Also, our collaboration partners retain access to the technologies underlying the milestone achievement for the remaining term of the agreement. Accordingly, we recognize revenue from milestone payments on a straight-line basis from the date of completion of the applicable performance objective to the end of the original term of the agreement, not including renewal periods unless renewal is assured at the time the agreement is executed. The unrecognized portion of milestone payments is reported as deferred revenue.

We receive funding for sponsored research or feasibility studies from commercial companies, government agencies and educational institutions. Funding for sponsored research or feasibility studies is typically non-refundable and not based upon performance objectives or customer acceptance. Also, we may receive funding in the form of periodic payments or reimbursement of actual costs. Accordingly, revenue from sponsored research and feasibility studies is recognized using the percentage of completion method or recognized as expenses are incurred depending on the form of funding. Under the percentage of completion method, the total contract value is multiplied by the percentage of actual research costs incurred to date compared to the estimated total costs to complete the contract as a whole. If collection of any funding is not assured, revenue recognized is limited to the lesser of the percentage of completion calculation or actual cash received to date. Revenue received for equipment purchases is deferred and recognized as revenue over the life of the agreement.

We provide licenses to third parties for the exclusive or non-exclusive access to certain of the Company's technologies for commercial development purposes. We may receive fees from such

licenses in the form of up-front payments, additional payments upon achievement of milestones, and royalty rights upon the successful commercialization by the licensee of a product containing the licensed technology. License agreements normally provide the licensee with immediate access to the Company's technology and do not require the Company to provide any research services or other support toward the licensee's commercial development efforts. Accordingly, we recognize up-front license fees as revenue upon the effective date of the licensee's first access to the Company's technologies. Additional license fees payable upon achievement of milestones are recognized as revenue upon such achievement and royalty payments are recognized as revenue when earned by the Company.

Research and Development—Research and development costs that are related to customer funded agreements are expensed as incurred and reported as costs of development agreements. Research and development costs not related to customer funded agreements are expensed as incurred and reported as research and development expense.

Stock-Based Compensation—We account for stock-based employee compensation plans using the intrinsic value method of accounting in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees", and related interpretations. Stock options issued to non-employees as consideration for goods or services provided to the Company are accounted for under the fair value method in accordance with SFAS No. 123, "Accounting for Stock-Based Compensation", which requires that compensation expense be recognized for all such options.

The following table presents the pro forma effect on the Company's reported net loss and net loss per share if we had applied the fair value method to our stock-based employee compensation plans for all periods presented:

	Year Ended December 31,		
	2002	2001	2000
Net loss as reported	$(33,184,000)	$(20,689,000)	$(16,300,000)
Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards	(4,428,000)	(5,423,000)	(1,567,000)
Pro forma net loss	$(37,612,000)	$(26,112,000)	$(17,867,000)
Net loss per share:			
Basic and diluted—as reported	$ (1.33)	$ (0.84)	$ (1.07)
Basic and diluted—pro forma	$ (1.51)	$ (1.06)	$ (1.17)

The pro forma adjustments were estimated using the Black-Scholes option-pricing model with the following weighted-average assumptions during 2002, 2001 and 2000: expected volatility of 109%, 98% and 100%, respectively; average risk-free interest rate of 4.3%, 4.7% and 5.9%, respectively; initial expected life of six years; and no expected dividend yield.

Income Taxes—The Company accounts for income taxes using the asset and liability approach whereby deferred income tax assets and liabilities are recognized for the estimated future tax effects, based on current enacted tax laws, of temporary differences between financial and tax reporting for current and prior periods. Deferred tax assets are reduced, if necessary, by a valuation allowance if the corresponding future tax benefits are not expected to be realized.

Comprehensive Income—There were no items of other comprehensive income (loss) in any period presented and, therefore, comprehensive loss is the same as net loss for all periods presented.

Net Loss Per Share—Basic net loss per share is computed by dividing the net loss for the period by the weighted average number of common shares outstanding during the period. Diluted net loss per share is computed by dividing the net loss for the period by the weighted average number of common shares outstanding during the period, plus the potential dilutive effect of common shares issuable upon exercise or conversion of outstanding stock options, warrants and convertible preferred stock during the period. The weighted average number of potentially dilutive common shares are 688,545, 839,154 and 7,909,347 in 2002, 2001 and 2000, respectively. These shares were excluded from diluted loss per share because of their anti-dilutive effect.

Reclassifications—Certain 2001 amounts have been reclassified to conform to the 2002 presentation.

2. Acquisition of Large Scale Proteomics

In February 1999, Large Scale Biology Corporation acquired approximately 92.5% of the outstanding common stock of Proteomics in exchange for 2,287,634 shares of the Company's Series G convertible preferred stock and options to purchase 60,562 shares of the Company's common stock. The Series G convertible preferred stock was subsequently converted into 3,431,448 shares of the Company's common stock. This acquisition was accounted for by the purchase method of accounting. The operating results of Proteomics are included in the consolidated statements of operations of the Company as of February 1, 1999. The purchase price of $25,100,000 was based on the estimated fair value of the net tangible and intangible assets received. As part of the acquisition, the Company acquired the option to purchase the remaining 7.5% of the outstanding common stock of Proteomics. In March 2000, the Company exercised its option and acquired the remaining 7.5% of the outstanding common stock of Proteomics for $74,000.

The significant intangible assets acquired included in-process research and development of $21,362,000, core technology of $2,497,000, and the option to purchase the remaining 7.5% of Proteomics, valued at $1,787,000. As a result of the acquisition of the remaining 7.5% of Proteomics, the Company recorded goodwill of $1,861,000, equal to the carrying value of the option and cash paid (see Note 5).

3. Initial Public Offering and Conversion of Preferred Stock

During the quarter ended September 30, 2000, the Company completed an initial public offering of 5,750,000 shares of its common stock at a price of $17.00 per share. The Company received net proceeds of $88,756,000 from the offering.

Concurrent with the initial public offering, all 5,605,813 outstanding shares of the Company's convertible preferred stock, having a stated value of $40,497,000, were automatically converted into 8,441,415 shares of the Company's common stock as follows:

Preferred Stock	Convertible Preferred Shares	Common Shares Conversion
Series A	666,667	999,997
Series B	878,003	1,316,993
Series C	338,336	537,432
Series D	435,173	655,550
Series F	1,000,000	1,499,995
Series G	2,287,634	3,431,448
	5,605,813	8,441,415

4. Property, Plant and Equipment

	December 31,	
	2002	2001
Machinery and equipment	$ 17,779,000	$ 18,426,000
Leasehold improvements	7,640,000	7,640,000
Building	4,580,000	3,206,000
Construction in progress	33,000	1,599,000
Land	373,000	373,000
	30,405,000	31,244,000
Accumulated depreciation	(15,540,000)	(12,362,000)
	$ 14,865,000	$ 18,882,000

In 2002, we determined that certain property, plant and equipment, primarily related to the Company's proteomics division, was obsolete, permanently idle or abandoned. As a result, we recognized a write-off of the net book value of the applicable assets or we reduced the net book value of the applicable assets to an estimated salvage value. The total adjustment to property, plant and equipment equaled $433,000. Assets written down to salvage value are deemed held for sale. The total salvage value of these assets equaled $350,000 at December 31, 2002 and we have included this balance in prepaid and other current assets in the consolidated balance sheet.

5. Intangible Assets

	December 31, 2002	December 31, 2001
Capitalized patent costs	$ 2,500,000	$ 2,455,000
Intellectual property licenses	3,664,000	3,461,000
Accumulated amortization	(1,730,000)	(683,000)
Patents and intellectual property licenses, net	$ 4,434,000	$ 5,233,000
Core technology	$ 2,497,000	$ 2,497,000
Non-compete agreement	—	500,000
Accumulated amortization	(2,445,000)	(2,104,000)
Other intangible assets, net	$ 52,000	$ 893,000

Capitalized patent costs at December 31, 2002 include $502,000 relating to issued or allowed patents for which amortization has begun. The remaining amounts relate to pending patents, amortization of which will begin when the patents are issued or allowed. In 2002, we determined that certain patent applications, primarily related to proteomics technologies, no longer possessed commercial viability or were inconsistent with the Company's business development strategy. As a result, we recognized a $396,000 write-off of capitalized patent costs. This adjustment is included in general and administrative expense.

Intellectual property licenses at December 31, 2002 include $2,150,000 paid to The Dow Chemical Company for the worldwide, exclusive or non-exclusive rights to certain plant gene technologies, $614,000 paid to Plant Biosciences Limited for the worldwide, exclusive right to specified technologies, $500,000 paid to Icon Genetics AG for the right to utilize specified technologies, and $400,000 paid to an individual for the worldwide, exclusive, non-royalty bearing license to certain biochip technology.

In 1999, the Company entered into an employment agreement with a founder of Proteomics. The employee agreed to a five-year non-compete covenant for which the Company paid him $500,000 over a two-year period. In connection with the employee's termination from the Company in 2002, the remaining term of the non-compete agreement was waived and amortization of the remaining balance of the intangible asset was accelerated to December 31, 2002. Total amortization expense in 2002 equaled $217,000.

Amortization of purchased intangibles (goodwill, assembled workforce and core technology) is reported separately in the consolidated statements of operations and equaled $624,000, $1,300,000 and $1,197,000 in 2002, 2001 and 2000, respectively. Amortization of intellectual property licenses is included in research and development expense and equaled $1,003,000, $383,000 and $80,000 in 2002, 2001 and 2000, respectively. Amortization of patents and the non-compete agreement are included in general and administrative expense and equaled $259,000, $139,000 and $133,000 in 2002, 2001 and 2000, respectively. Future amortization of intangible assets is as follows:

2003	$ 802,000
2004	598,000
2005	598,000
2006	458,000
2007	68,000
Thereafter	1,962,000
Total amortization	$4,486,000

Goodwill

In connection with the acquisition of Proteomics (see Note 2), the Company recorded goodwill equal to the excess of the fair value of the consideration given over the estimated fair value of the assets and liabilities received. The Company also allocated a portion of the purchase price of Proteomics to assembled workforce, an intangible asset. Effective January 1, 2002, the Company adopted SFAS No. 141, "Business Combinations", and SFAS No. 142, "Goodwill and Other Intangible Assets." The adoption of these new accounting standards resulted in the following changes in accounting:

- SFAS No. 141 does not recognize assembled workforce as an identifiable intangible asset. Accordingly, the carrying amount of assembled workforce as of December 31, 2001, equal to $115,000, was reclassified from other intangible assets to goodwill.
- SFAS No. 142 discontinued the amortization of goodwill effective January 1, 2002. Instead, the unamortized balance of goodwill must be tested for impairment annually, or sooner if indicators of potential impairment exist, based upon a fair value approach.

In accordance with SFAS No. 142, we performed an initial impairment test of goodwill as of January 1, 2002 and found no evidence of impairment. However, our annual impairment test of goodwill on December 31, 2002 indicated the goodwill balance was impaired given the fair value of the Company's proteomics division was determined to be less than its carrying value. As a result, we recognized an impairment loss equal to the remaining balance of goodwill, or $839,000. No other changes to goodwill were recognized in 2002. We evaluated several factors to determine the fair value of the proteomics division including projected cash flows of the proteomics division and the significant decrease in the Company's market capitalization during 2002.

The following pro-forma presentation adjusts the net loss reported in the prior year periods for the exclusion of goodwill amortization:

	Year Ended December 31,		
	2002*	2001	2000
Reported net loss	$(33,184,000)	$(20,689,000)	$(16,300,000)
Goodwill amortization	—	676,000	576,000
Adjusted net loss	$(33,184,000)	$(20,013,000)	$(15,724,000)
Reported basic and diluted net loss per share	$ (1.33)	$ (0.84)	$ (1.07)
Goodwill amortization	—	0.03	0.04
Adjusted basic and diluted net loss per share	$ (1.33)	$ (0.81)	$ (1.03)

* Includes $839,000 charge for impairment of goodwill.

6. Other Assets

	December 31,	
	2002	2001
Restricted cash	$573,000	$ 716,000
Employee notes receivable	194,000	196,000
Deposits and long-term prepaid expenses	16,000	157,000
	$783,000	$1,069,000

Restricted cash represents a certificate of deposit held as security for a facility lease.

7. Borrowings

	December 31,	
	2002	2001
$500,000 note payable bearing interest at 5%, payable through August 2008 in monthly installments of $5,000 and secured by the Owensboro biomanufacturing facility and certain equipment	$ 310,000	$ 356,000
Less current portion	(145,000)	(107,000)
Total long-term debt	$ 165,000	$ 249,000

Future principal payments of debt will be as follows:

2003	$145,000
2004	32,000
2005	34,000
2006	36,000
2007	37,000
Thereafter	26,000
Total principle payments	$310,000

8. Dow Contract

The Company entered into a Collaboration and License Agreement with The Dow Chemical Company and its subsidiary, Dow AgroSciences LLC (collectively "Dow"), on September 1, 1998. The collaboration portion of the agreement ("Dow Collaboration") had a three-year term ending in August 2001. Under the Dow Collaboration, the Company received funding for sponsored genomics research and payments for technology access fees and milestone achievements. The research funding was not contingent on achievement of certain results. Accordingly, no obligation to repay any funded amounts or repurchase technology has been recorded. Revenues from Dow represented 85% and 86% of total revenues for 2001 and 2000, respectively. The Dow Collaboration ended in August 2001. In October 2001, the Company received $3,395,000 from Dow as a final payment under the terms of the Dow Collaboration.

Technology Access Fees

In 1998, the Company received $10,000,000 from Dow in exchange for access to the Company's technologies and a warrant granted to Dow (the "Dow Warrant") to purchase 1,848,091 shares of the Company's common stock, subject to certain vesting provisions. Using the Black-Scholes option-pricing model, the Company determined that the fair value of the Dow Warrant was $1,392,000 on the issuance date and such amount was recorded as a warrant liability in 1998 (see Note 10). The remaining technology access fee of $8,608,000 was recorded as deferred revenue and was recognized on a straight-line basis over the three-year term of the Dow Collaboration ending in August 2001. Amortized revenue of $1,916,000 and $2,868,000 was recorded during 2001 and 2000, respectively.

Milestone Payments

In 1999, the Company received $20,000,000 from Dow for achievement of certain milestones specified in the Dow Collaboration. A portion of this amount was attributed to the fair value of the Dow Warrant shares vesting in 1999. Using the Black-Scholes option-pricing model, the Company determined that the fair value of the Dow Warrant vesting in 1999 was $3,411,000 and such amount was recorded as additional warrant liability in 1999 (see Note 10). The remaining milestone payment amount of $16,589,000 was recorded as deferred revenue and was recognized on a straight-line basis from the date of completion of the milestones to the end of the Dow Collaboration in August 2001. The Company received $1,500,000 from Dow in 2000 for achieving an additional milestone and such amount was recorded as deferred revenue and amortized on the same basis as the earlier milestone payment. Amortized revenue of $6,519,000 and $8,768,000 was recorded in 2001 and 2000, respectively.

Research Funding

Revenue related to research performed under the Dow Collaboration was $3,309,000 and $8,332,000 in 2001 and 2000, respectively.

9. Commitments

The Company leases facilities under operating leases and incurred facility rental expenses of $1,790,000, $1,836,000 and $690,000 during 2002, 2001 and 2000, respectively. Additionally, the Company has research sponsorship agreements with major universities, government institutions or other companies whereby the Company funds specific projects of interest to the Company. Expenses under these agreements totaled $1,434,000, $2,240,000 and $3,671,000 during 2002, 2001 and 2000, respectively.

Future non-cancelable minimum payments under operating leases and research agreements are as follows:

	Operating Leases	Research Agreements
2003	$1,758,000	$136,000
2004	948,000	—
2005	806,000	—
2006	830,000	—
2007	855,000	—
Thereafter	2,723,000	—
	$7,920,000	$136,000

In addition to the future non-cancelable minimum payments above, certain of the research agreements require future aggregate payments of $102,000 if the agreements are not cancelled.

In June 2001, the Company entered into a patent license agreement for a two-year worldwide exclusive right to specified technologies. The agreement provides extension options for exclusive or non-exclusive rights beginning in year three. The agreement provides the licensor an option, through June 2004, to require the Company to fund research of a laboratory associated with the licensor. If such option is exercised, the required research funding will be at least $200,000 per year.

In January 2001, the Company entered into an agreement with Biosite Inc. whereby the Company originally committed to pay $6,760,000 over 14 months for the purchase of antibodies. Later in 2001, Biosite and Xoma Ltd. (and certain Xoma affiliates) sued each other over intellectual property issues. That litigation impacted work Biosite had agreed to do for the Company under the agreement. Because of this litigation, the Company voided the agreement in January 2002. We have not paid and do not expect to pay any amounts to Biosite under the terms of the voided agreement.

The Company has patent license agreements with major universities that require the Company to pay royalties based on product sales, subject to minimum annual royalty amounts. These arrangements remain in effect until the expiration of all related patents or upon termination of the agreements by the Company. Each arrangement is cancelable by the Company

upon ninety days notice without significant liability to the Company. Royalty payments equaled $100,000, $137,000 and $147,000 in 2002, 2001 and 2000, respectively. The Company's non-cancelable obligation related to royalty agreements at December 31, 2002 was $31,000.

10. Stockholders' Equity

Stock Issued

On November 1, 2001, an employee purchased 100,000 shares of common stock from the Company at a price of $3.45 per share, equal to the fair market value of the Company's stock on that date.

Warrants

In 2001, an employee was granted a warrant to purchase 250,000 shares of common stock. The warrant becomes exercisable in full if the quoted value of the Company's common stock, as reported on the NASDAQ National Market, equals an average of at least $6.84 for any consecutive 20-business-day period prior to February 15, 2006. The exercise price of the warrant is $5.13 per share and the warrant expires on February 14, 2012. We will recognize compensation expense of approximately $428,000 if and when the warrant becomes exercisable.

The Company has reserved 1,848,091 shares of common stock for issuance upon the exercise of a warrant granted on September 1, 1998 to Dow in conjunction with the Dow Collaboration (see Note 8). The warrant is exercisable at $10.14 a share and expires on August 31, 2003. Portions of a technology access fee received in 1998 and a milestone payment received in 1999 from Dow were attributed to the warrant based on its fair value. The warrant was revalued on August 9, 2000 resulting in the recognition of $811,000 of expense in 2000. Because Dow held a put option for any shares obtained upon exercise of the warrant, the Company could have been obligated to repurchase the related common stock at its fair market value under certain conditions. Accordingly, the warrant was originally reported as a liability because of this put feature. Concurrent with the Company's initial public offering, the put feature expired and the warrant liability was reclassified to stockholders' equity in 2000. The following assumptions were used at August 9, 2000 to determine the fair value of the warrant: expected volatility of 60%; risk-free interest rate of 6.2%; expected life of 3.1 years; and no expected dividend yield.

The Company has reserved 43,983 shares of common stock for issuance upon the exercise of warrants granted during 1988. These warrants are exercisable at $1.59 per share and expire on August 9, 2005.

Stock Plans

Effective July 1, 2002, certain Company employees realized a 10% annual reduction in future cash compensation. Three executive officers previously reduced their annual cash compensation between 8%-10% effective December 1, 2001. These officers now realize reductions of approximately 17%-20% of their annual cash compensation. The reductions in cash compensation will be replaced in equal amounts by compensation in the form of the Company's common stock per the terms of a Stock Issuance Program ("Program") under the Company's 2000 Stock Incentive Plan. Beginning September 30, 2002 and at the end of each of the following three quarterly periods, each participant will receive an award of common stock equal to 25% of

their respective annual reduction in cash compensation. The number of shares awarded to each participant will equal each participant's award amount divided by the closing price of the Company's common stock as reported on the NASDAQ National Market on the last trading day of each quarterly period. The awarded shares are subject to both a vesting requirement and a repurchase right granted to the Company. The Company will hold the awarded shares in escrow until the repurchase right expires. Participants will "cliff vest" in their respective shares on July 1, 2003. The Company's repurchase right is exercisable if and only if the Company does not realize positive cash flows (as defined in the terms of the Program) during the six month period ended June 30, 2005. The repurchase price is equal to the original issuance price of each of the quarterly stock awards. Upon the expiration or exercise of the Company's repurchase right in July 2005, participants will receive either their awarded shares or an amount of cash equal to the cumulative repurchase price. In 2002, the Company issued 226,003 shares of common stock under the Program and recorded deferred compensation expense of $245,000. Stock compensation expense of $41,000 was recorded in 2002.

The Company's Employee Stock Purchase Plan ("ESPP") allows employees to purchase shares of the Company's common stock through payroll deductions. The ESPP issued 61,756 and 48,433 shares in 2002 and 2001, respectively. No shares were issued in 2000. At December 31, 2002, a total of 733,203 shares of common stock were reserved and available for issuance by the ESPP.

Under the Company's 2000 Stock Incentive Plan (the "Plan"), the Company's employees, officers, directors and consultants may be granted options to purchase shares of the Company's common stock. Options granted under the Plan may be either incentive stock options or nonqualified stock options. Incentive stock options may be granted only to Company employees (including officers and directors who are also employees). Nonqualified stock options may be granted to Company employees, directors and consultants. The vesting period and exercise price of the stock options are determined by the Company's Board of Directors. Stock options granted under the Plan are exercisable over a ten-year period from the grant date and have vesting periods ranging from immediate vesting to four years. Incentive and nonqualified stock options granted under the Plan may be granted at exercise prices no less than 100% and 85%, respectively, of the fair value of the Company's common stock on the date of grant. However, an option granted to a 10% shareholder under the Plan shall be granted at an exercise price not less than 110% of the fair value of the Company's common stock on the date of grant. The Plan includes a net exercise provision whereby shares of the Company's common stock that are owned at least one year by options holders can be exchanged at fair market value to pay the option exercise price. Employees and consultants exchanged 70,617, 8,141 and 19,779 shares of common stock under the net exercise provision during 2002, 2001 and 2000, respectively.

The Company has reserved 9,028,651 shares of common stock for issuance under the Plan. At December 31, 2002, 2,182,997 shares of common stock were available for grant. Outstanding stock options are summarized as follows:

	Number of Options	Weighted Average Exercise Price
Outstanding, December 31, 1999	4,245,307	5.35
Granted	346,200	22.79
Exercised	(974,005)	2.33
Forfeited	(106,221)	6.49
Outstanding, December 31, 2000	3,511,281	7.87
Granted	3,391,900	5.42
Exercised	(105,307)	2.54
Forfeited	(387,983)	16.55
Outstanding, December 31, 2001	6,409,891	6.14
Granted	1,742,250	1.28
Exercised	(138,586)	2.05
Forfeited	(1,167,901)	6.29
Outstanding, December 31, 2002	6,845,654	4.96
Exercisable options:		
December 31, 2000	2,163,118	6.14
December 31, 2001	3,061,060	6.53
December 31, 2002	3,962,343	6.20

The weighted-average fair value of options granted was $1.07, $4.35 and $18.58 in 2002, 2001 and 2000, respectively. At December 31, 2002, consultants held 907,312 outstanding stock options.

The following table summarizes information about stock options outstanding and exercisable under the Plan at December 31, 2002:

	Outstanding Options			Exercisable Options	
Range of Exercise Prices	Number of Options	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Number of Options	Weighted-Average Exercise Price
$0.27 to $2.33	1,770,515	9.11	$1.29	375,250	$1.39
$3.00 to $7.50	4,721,090	7.59	5.86	3,281,088	6.31
$8.01 to $22.50	354,049	5.47	11.16	306,005	10.87
	6,845,654	7.87	4.96	3,962,343	6.20

Stock Compensation

On November 1, 2001, the Company issued, subject to the Company's right of reversion, 200,000 shares of common stock to an employee. These shares vest and the Company's right of reversion lapses according to the following schedule: 50,000 shares on January 1, 2002, and thereafter in twelve equal quarterly installments of 12,500 shares beginning on February 1, 2002. Any unvested shares will immediately vest under certain circumstances. The fair market value of

the Company's common stock on the grant date was $3.45 and the Company recorded total deferred compensation of $690,000 on that date. At each vesting date in 2002, the employee elected to revert a portion of the vested shares to the Company to settle minimum statutory payroll taxes realized by the employee but paid by the Company. In 2002, a total of 42,126 shares were reverted to the Company and deferred compensation was reduced by $145,000. The balance of deferred compensation is being amortized consistent with the vesting schedule. Combined expenses for stock compensation and payroll taxes equaled $142,000 and $201,000 in 2002 and 2001, respectively.

The Company granted options to consultants to purchase 15,000, 65,000 and 39,000 shares of the Company's common stock in 2002, 2001 and 2000, respectively. The exercise prices per share for options granted was $1.46 in 2002 and ranged from $4.75 to $6.19 in 2001 and $14.31 to $22.50 in 2000. The options have a 10-year life and vest over periods ranging from three to four years. The fair value of each option was estimated on the date of grant and revalued during the vesting period using the Black-Scholes option-pricing model with the following weighted-average assumptions during 2002, 2001 and 2000: expected volatility of 109%, 98% and 100%, respectively; risk-free interest rate of 4.3%, 5.2% and 5.4%, respectively; initial expected life of ten years; and no expected dividend yield. Stock compensation income/expense of ($12,000), $187,000 and $136,000 was recorded in 2002, 2001 and 2000, respectively.

On December 31, 1999, the Company granted options to employees, officers and directors to purchase 1,545,000 shares of the Company's common stock. These options have exercise prices ranging from $6.67 to $7.50 per share, have a 10-year life and were fully vested as of December 31, 2002. Deferred compensation in the amount of $7,809,000 was recorded as the difference between the exercise price and the estimated fair value of the common stock as of December 31, 1999. The deferred compensation was amortized over the three-year vesting period. Stock compensation expense of $2,604,000, $2,604,000 and $2,601,000 was recorded in 2002, 2001 and 2000, respectively.

In December 1999, certain officers and employees were granted options to purchase 765,000 shares of the Company's common stock at an exercise price of $7.50 per share that became fully exercisable upon the closing of the Company's initial public offering. Stock compensation expense of $7,268,000 was recognized in 2000 based on the difference between the exercise price of the options and the fair market value of the Company's common stock at the date of the initial public offering.

The Company issued 1,065 shares of common stock valued at $7,000 in 2001 to non-employees in exchange for consulting and research and development services.

Stockholders' Notes Receivable

The Company's Board of Directors has authorized the issuance of up to $650,000 of notes receivable to allow salaried employees, who are not Company officers, to exercise stock options by borrowing the aggregate exercise price from the Company. Employees borrowed $10,000 to purchase 1,500 shares of common stock in 2000. These notes are secured by the underlying stock and are recorded as a reduction of stockholders' equity.

11. Employee Benefit Plan

The Company sponsors a 401(k) defined contribution retirement plan covering all employees who meet certain eligibility requirements. The Company makes discretionary matching contributions equal to 25% (50% through June 2002) of employee contributions up to a maximum of 1.5% of an employee's compensation, subject to statutory limits. The Company's contributions under this plan amounted to $221,000, $264,000 and $243,000 in 2002, 2001 and 2000, respectively.

12. Income Taxes

The provision for income taxes differs from the amount computed by applying the statutory Federal income tax rate as follows:

	Year Ended December 31,		
	2002	2001	2000
Federal income tax benefit at statutory rate	(35.0)%	(35.0)%	(35.0)%
Research and development credits	(2.0)	(4.3)	(4.6)
Change in valuation allowance for income taxes	35.3	38.9	39.0
Other	1.7	0.4	0.6
	0.0%	0.0%	0.0%

The significant components of net deferred income tax assets are:

	December 31,	
	2002	2001
Deferred tax assets:		
Net operating loss carryforwards	40,826,000	29,530,000
Tax credit carryforwards	9,178,000	7,884,000
Capitalized project costs	835,000	1,389,000
Deferred compensation	3,983,000	3,810,000
Other	1,541,000	1,335,000
Total deferred tax assets	56,363,000	43,948,000
Deferred tax liabilities—intangible assets	(957,000)	(1,355,000)
Valuation allowance	(55,406,000)	(42,593,000)
Net deferred income tax asset	$ —	$ —

At December 31, 2002, the Company had net operating loss carryforwards of $105,889,000 and $59,818,000 available to reduce future Federal and state taxable income, respectively. These net operating loss carryforwards expire between 2009 and 2022 for Federal income tax purposes and expire between 2005 and 2012 for state income tax purposes. The difference between the Federal and state net operating loss carryforwards is due to the California limitation on loss carryforwards (60%, 55% and 50% in 2002, 2001 and 2000, respectively) and the capitalization of certain research costs for state income tax purposes. Additionally, at December 31, 2002, the Company had research and other tax credit carryforwards of $5,024,000 and $4,154,000 available to reduce future Federal and state income taxes, respectively. These tax credits expire between 2003 and 2017 for Federal income tax purposes and have no date of expiration for state income

tax purposes. The Company has fully reserved all net deferred tax assets as management does not believe that their future realization is more likely than not.

The extent to which the net operating loss carryforwards can be used to offset future taxable income may be limited if changes in the Company's stock ownership exceed certain defined limits.

13. Supplemental Cash Flow Disclosures

In 2002 and 2001, the Employee Stock Purchase Plan issued 61,756 and 48,433 shares of Company common stock, valued at $135,000 and $389,000, respectively, to employees.

In 2002, the Company recorded deferred compensation of $245,000 related to stock awarded to employees. In 2001, the Company recorded deferred compensation of $690,000 related to stock granted to an employee.

In 2000, $12,191,000 of warrant liability was reclassified to stockholders' equity due to the expiration of a put option concurrent with the Company's initial public offering of common stock (see Note 10).

With the acquisition of the remaining 7.5% of the outstanding common stock of Proteomics in March 2000, the Company recorded goodwill of $1,861,000, equal to the $1,787,000 carrying value of a put option and cash paid of $74,000 (see Note 2).

In 2000, the Company issued 1,500 shares of common stock in exchange for a $10,000 note receivable.

14. Related Party Transactions

In 1999, the Company entered into a license agreement with Icon Genetics Inc., an affiliate of Icon Genetics AG ("Icon"), and the International Institute of Cell Biology, National Academy of Sciences of Ukraine (the "Institute"). The Company's Chief Executive Officer and Chairman of the Board of Directors serves as Chairman of the Supervisory Board of Icon. The license provides the Company an exclusive, worldwide license to specified technology for a paid license fee of $300,000. The Company was also granted a worldwide, non-exclusive license to specified technology for a 2% royalty on the sale of products developed with such technology. An additional $200,000 was paid by the Company upon achievement of milestones specified in the license agreement. In 2000, the Company entered into a one-year research services agreement with Icon that provided for cumulative payments of $200,000 to Icon. In 2001, the Company entered into another license agreement with Icon for the worldwide, non-exclusive license to specified technology for a paid license fee of $500,000. Under these agreements, the Company paid a combined total of $537,500 and $450,000 in 2001 and 2000, respectively, to Icon Genetics Inc., Icon and the Institute.

In 1999, pursuant to an employment agreement with a founder of Proteomics, the Company paid the employee $500,000 over two years for a five-year non-compete agreement. In addition, the Company entered into a license and consulting agreement with the employee covering certain biochip technology developed by him. The license is a worldwide, exclusive, non-royalty

bearing license to the biochip technology. This agreement required monthly payments of $4,000 and $6,667 for consulting services over two years and for license fees over five years, respectively. The balance payable of the license fee was accelerated in June 2002 in conjunction with the employee's termination from the Company. Expenses related to these agreements totaled $173,000, $188,000 and $228,000 in 2002, 2001 and 2000, respectively.

Two of the Company's former directors are managing directors of Technology Directors, Inc. ("TDI"). In 1998, the Company entered into a consulting and business development arrangement with TDI whereby TDI provided management advisory services to the Company. Compensation received by TDI for the management advisory services included a fee based upon amounts received by the Company from Dow under a collaboration agreement (see Note 8). Expenses related to this agreement totaled $66,000 and $99,000 in 2001 and 2000, respectively.

15. Quarterly Results of Operations (Unaudited)

The following interim financial information presents the Company's 2002 and 2001 quarterly results of operations:

	Three Months Ended			
	December 31	September 30	June 30	March 31
2002				
Revenues	$ 997,000	$ 710,000	$ 490,000	$ 425,000
Loss from operations	(7,423,000)	(6,920,000)	(9,760,000)	(9,771,000)
Net loss	(7,320,000)	(6,764,000)	(9,554,000)	(9,546,000)
Net loss per share—basic and diluted	(0.29)	(0.27)	(0.38)	(0.38)
2001				
Revenues	$ 678,000	$ 5,129,000	$ 5,943,000	$ 5,981,000
Loss from operations	(10,020,000)	(5,452,000)	(4,738,000)	(3,590,000)
Net loss	(9,619,000)	(4,801,000)	(3,877,000)	(2,392,000)
Net loss per share—basic and diluted	(0.39)	(0.20)	(0.16)	(0.10)

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, on March 28, 2003.

LARGE SCALE BIOLOGY CORPORATION

By: /s/ ROBERT L. ERWIN
Robert L. Erwin,
Chairman of the Board
and Chief Executive Officer

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 on March 28, 2003.

Name	Title
/s/ ROBERT L. ERWIN Robert L. Erwin	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)
/s/ JOHN D. FOWLER, JR. John D. Fowler, Jr.	President, Director
/s/ RONALD J. ARTALE Ronald J. Artale	Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ MARVYN CARTON Marvyn Carton	Director
/s/ BERNARD I. GROSSER Bernard I. Grosser, M.D.	Director
/s/ SOL LEVINE Sol Levine	Director
/s/ KEVIN J. RYAN Kevin J. Ryan	Director

Certification

I, Robert L. Erwin, certify that:

1. I have reviewed this annual report on Form 10-K of Large Scale Biology Corporation;

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

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

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

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

b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

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

a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 28, 2003

/s/ ROBERT L. ERWIN

Robert L. Erwin,
Chairman of the Board
and Chief Executive Officer

Certification

I, Ronald J. Artale, certify that:

1. I have reviewed this annual report on Form 10-K of Large Scale Biology Corporation;

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

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

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and have:

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

b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

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

a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: March 28, 2003

/s/ RONALD J. ARTALE

Ronald J. Artale,
Senior Vice President
and Chief Financial Officer

To our Shareholders: *(Continued from inside cover)*

- *Aprotinin*: LSBC's proprietary GENEWARE® technology has proven its ability to produce commercially desirable quantities of aprotinin, a serine-protease inhibitor employed to minimize bleeding and to decrease inflammation during cardio-pulmonary bypass surgery. We are discussing licensing opportunities with potential partners for the development of LSBC's aprotinin as a generic biologic in a market estimated between $100-$300 million.

- *NHL Vaccine*: We completed successfully the Phase I clinical trials for our personalized therapeutic cancer vaccines for the treatment of non-Hodgkin's lymphoma (NHL) and expect to submit a plan later this year to the Food and Drug Administration (FDA) that may result in our ability to proceed directly to Phase III trials without an intermediate study. As has been announced, the Company is seeking financial partnership to undertake future NHL trials. In addition to the importance of advancing the drug's potential global marketability, the continuing demonstration of the viability of the Company's unique GENEWARE technology is extremely encouraging.

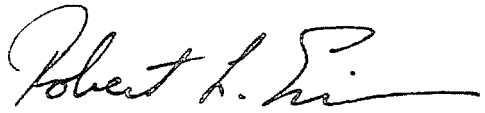
- *Adult Stem Cell Growth Factor*: Independent studies continue to demonstrate commercial potential for LSBC's initiatives in promoting self-renewal of adult human stem cells.

- *New Patents*: LSBC had 53 new patents issued in 2002, impacting each key component of the Company's technology base and bringing its total issued patents to 57 U.S. and 50 foreign.

LSBC has expanded certain existing alliances and forged new collaborations with distinguished partners, while the entire biotechnology industry has experienced an unprecedented reduction of commercial agreements in the past year as companies, institutions and governments strive to retain cash for an uncertain future. In the face of those deal-closing challenges, our publicly announced new alliances and collaborations have contributed near-term revenue, validation of our complex proprietary technology platforms and the longer-term opportunity to participate in the financial success of our partners' products through licensing fees, milestone payments and product revenues or royalties.

Throughout 2002, strong measures were taken to improve management performance in all areas through cost-saving programs and staff reductions resulting in annualized savings of $10 million; prioritizing research and development efforts; strengthening business development; and sharpening near term product focus.

In these "best of times, worst of times," we are optimistic about the future of our Company and thank our Shareholders, customers, collaborators and employees for their continuing commitment to the achievement of our common goals. We believe that these tough times will get better for our economy, our industry and our Company. We are committed to improving the record of our stewardship of your investment in this ambitious and unique scientific commercial enterprise: *Large Scale Biology Corporation.*



Robert L. Erwin
Chairman of the Board

Large Scale Biology Corporation
Company Information

Officers

Kevin J. Ryan
President and Chief Executive Officer

Ronald J. Artale
Senior Vice President, Chief Operating Officer and Chief Financial Officer

Michael D. Centron
Vice President and Treasurer

Laurence K. Grill, Ph.D.
Senior Vice President, Research and Chief Scientific Officer

R. Barry Holtz, Ph.D.
Senior Vice President
Biopharmaceutical Development

David R. McGee, Ph.D.
Executive Vice President

Daniel J. Moriarty
Vice President, Corporate Affairs

John S. Rakitan
Senior Vice President
and General Counsel

Daniel Tusé, Ph.D.
Vice President, Business Development

Robert J. Walden
Senior Vice President

Board of Directors

Robert L. Erwin
Chairman of the Board

Kevin J. Ryan
President and Chief Executive Officer

Marvyn Carton
Executive Vice President and Director (Retired), Allen & Company

John D. Fowler, Jr.
Managing Director
Baycrest Capital, LLC

Bernard I. Grosser, M.D.
Professor and Chairman,
Department of Psychiatry
University of Utah School of Medicine

Sol Levine
Former President, Revlon, Inc.

Company Headquarters

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Vacaville, CA 95688
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Fax: 301-354-1300

Biomanufacturing Division

Large Scale Biology Corporation
Biomanufacturing Division
3700 Airpark Drive
Owensboro, KY 42301
Phone: 270-926-2405
Fax: 270-926-2385

Investor Relations

Additional copies of this annual report are available without charge upon request from LSBC Investor Relations.
Phone: 707-446-5501 x308
e-mail: irinfo@lsbc.com

This annual report, as well as other financial information, are also available on our web site at www.lsbc.com (select Investor Info).

Transfer Agent

EquiServe
Shareholder Services
PO Box 43010
Providence, RI 02940-3010
Phone: 781-575-3400
www.equiserve.com

Annual Meeting

Our annual meeting of stockholders will be held on Thursday, May 29, 2003 at 10 a.m. local time, at the Embassy Suites Hotel (Chicago-O'Hare)
5500 North River Road
Rosemont, Illinois