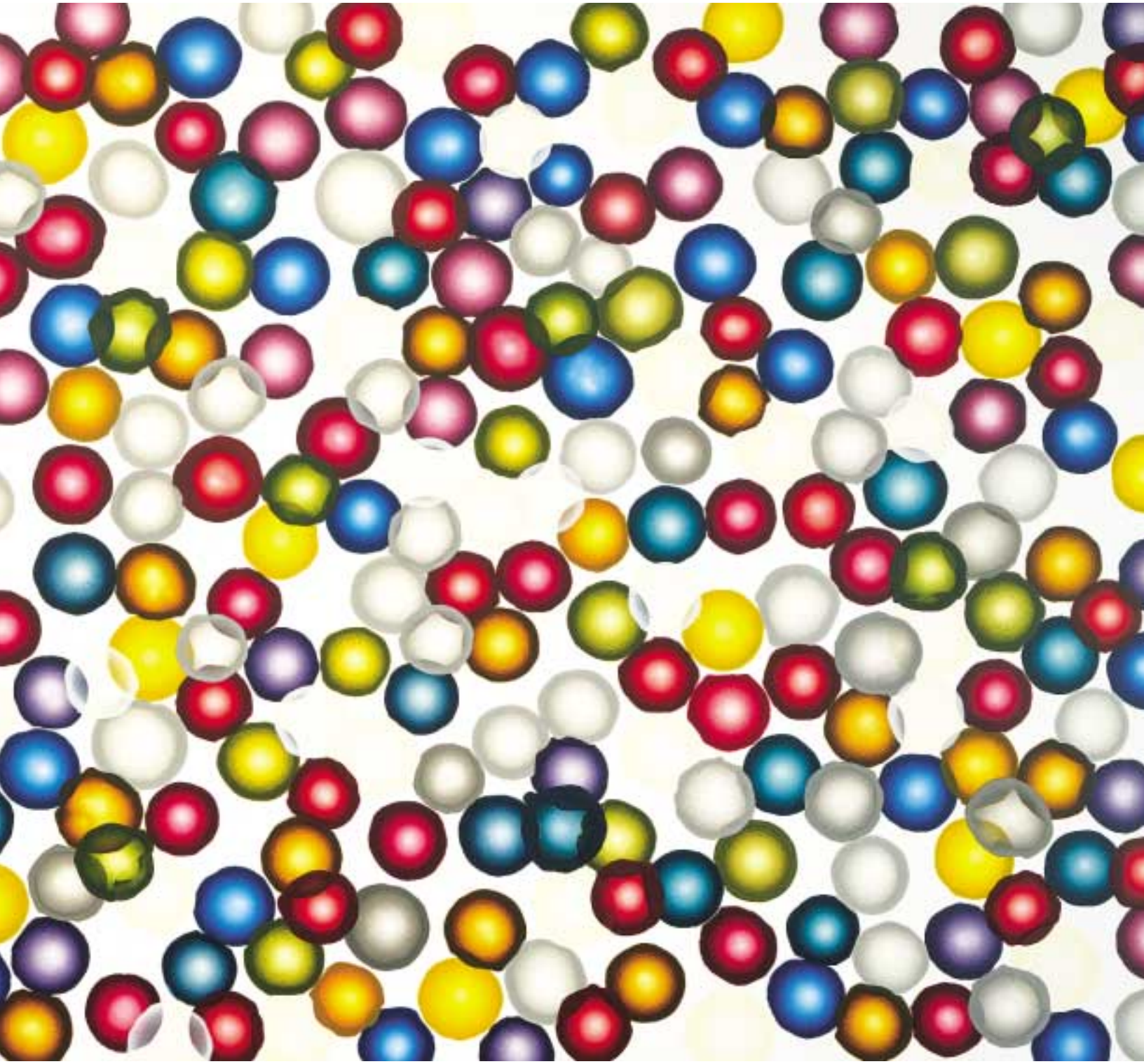
HUMAN GENOME SCIENCES



FROM GENES TO DRUGS

2001 ANNUAL REPORT

FROM GENES TO DRUGS

Human Genome Sciences is a company with a mission to treat and cure disease by bringing new gene-based drugs to patients.

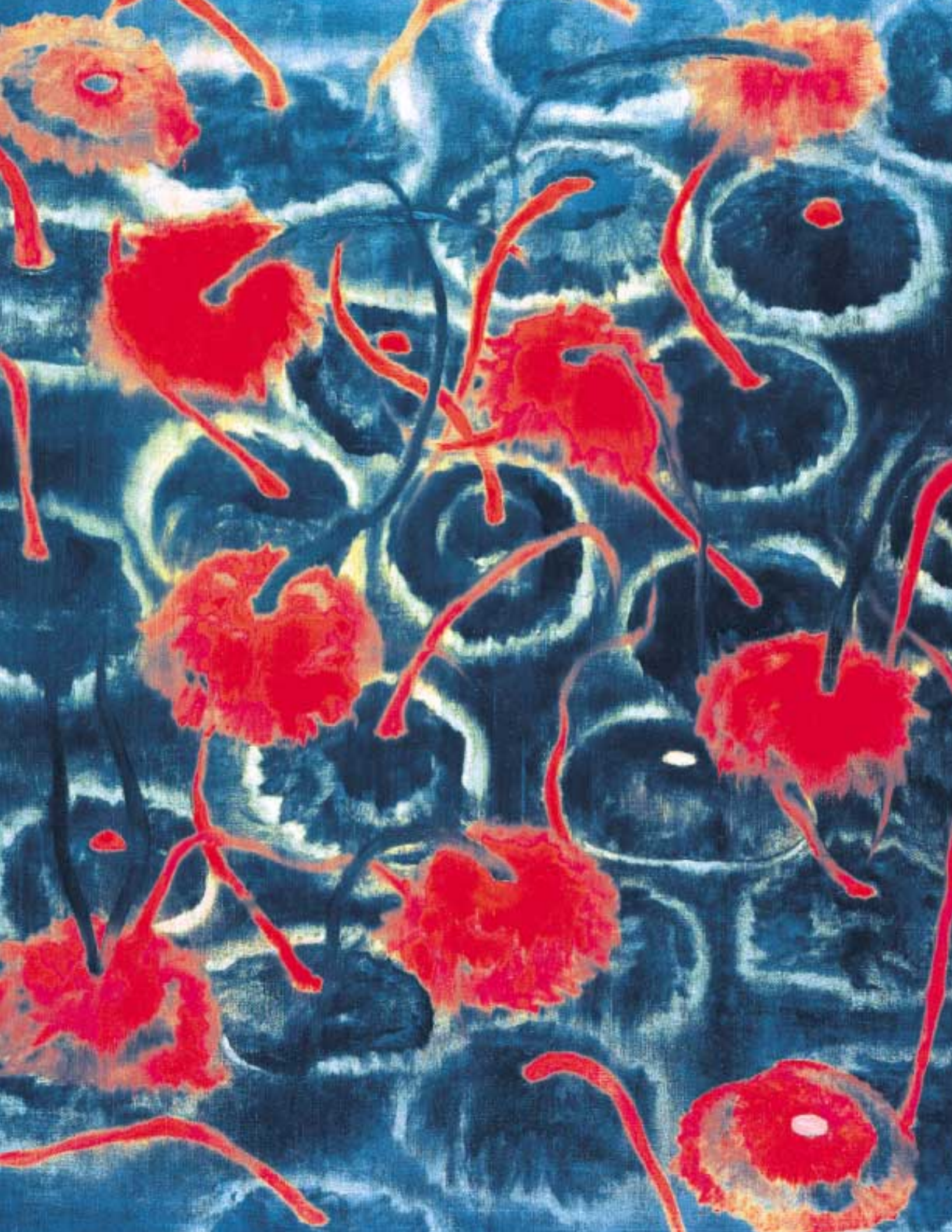
NINE PRODUCTS INTO CLINICAL TRIALS

YEAR	DRUG	USE
1997	Repifermin	Cancer, Tissue Repair
1998	Mirostipen	Cancer
2000	BLyS™	Immunodeficiency
	Albuferon™	Cancer, Hepatitis C
2001	Albutropin™	Growth Deficiency
	LymphoStat-B™	Lupus, Rheumatoid Arthritis
	Albuleukin™	Cancer
2002	TRAIL-R1 mAb	Cancer
	LymphoRad™*	Cancer
	more to come	

*IND filed January 2002

COVER: MYSTICISM FOR BEGINNERS, 2001

HISTORY OF MY HEART, 1996



TO OUR SHAREHOLDERS

Human Genome Sciences is dedicated to discovery for health. Our goal is to build a biopharmaceutical company that translates breakthrough science to breakthrough treatments for patients.

Today we have seven drugs in human clinical development for the treatment of cancer, autoimmune disease, immunodeficiency and tissue repair. As of March 2002, we have applied for permission to initiate human trials for an additional two cancer drugs. We believe that we have created one of the most efficient discovery and development processes in the industry for moving novel drugs from concept to clinic.

The number of new drugs we have waiting for clinical trials continues to grow. We now categorize these new drug candidates by therapeutic or franchise areas—oncology, autoimmunity/immunology, diabetes/metabolism, tissue repair, osteoporosis/bone remodeling and HIV/AIDS.

The success of our drug discovery efforts rests firmly on our expertise in genomics, the systematic collection and understanding of human genes and their functions, as well as our exclusive focus on developing human protein and antibody drugs. Our drug candidates are divided roughly evenly among novel human protein drugs, antibody drugs and new improved versions of existing protein drugs. We have the infrastructure necessary to discover, develop, formulate, manufacture and conduct clinical trials of all three types of protein and antibody drugs.

We continue to expand and strengthen the infrastructure necessary to bring these drugs to market. We are constructing a commercial-scale protein and antibody drug manufacturing facility. We are also strengthening our clinical trials and regulatory affairs teams, as well as our business development group to advance our partnering initiatives.

Our Company continues to be in sound financial health. At the end of 2001, our cash balance was close to $1.7 billion. In total, we consumed approximately $85 million in cash during 2001. I believe that we have the people and resources needed to execute the next phases of our development—to advance clinical trials of our existing drugs, to initiate clinical trials with new compounds and to continue our fruitful discovery efforts. We look forward to an exciting and productive year, and thank you for your continued support.

William A. Haseltine, Ph.D.
Chairman and Chief Executive Officer

March 31, 2002

OVEREXPRESSION, 1998

SUSAN BATESON MCKAY, SENIOR VICE PRESIDENT, HUMAN RESOURCES

OUR PEOPLE

To our employees, Human Genome Sciences is about opportunities. The opportunity to bring new gene-based treatments and cures to patients who need them. The opportunity to combine breakthrough science and business efforts in a fast-paced and fast-growing organization. The opportunity of unlimited career growth as we realize our goal of becoming a global biopharmaceutical leader. Employees tell us that all of these opportunities matter to them. Opportunity is what our employees value most about working at Human Genome Sciences.

To the Company and its management, our employees are about success.

- Our success in delivering results because we are able to count on employees to meet or exceed goals and commitments, and to remove obstacles.

- Our success in innovating and driving change through employees who develop new and unique approaches, and who look for opportunities to make a difference.

- Our success in setting and following through on the right priorities because we have employees who can manage multiple projects, create focus for others, shift priorities as needed, and still focus on what is critical to our mission.

- Our success in working collaboratively as part of teams because employees put Human Genome Sciences first, and are flexible and responsive to the Company and their colleagues.

These are among the success factors that matter to us. This is what we value most as each employee carries through on his or her responsibilities at Human Genome Sciences.

In February 2002, Human Genome Sciences crossed a people milestone: we surpassed 1,000 employees. Our retention rates are high. We remain committed to supporting employees both professionally and personally, and to rewarding them for their contributions to the Company. We thank all of our employees for their drive, talent and passion; these qualities make Human Genome Sciences a great company and a great place to work.

ELLEN S. BARON, PH.D., SENIOR VICE PRESIDENT, BUSINESS DEVELOPMENT

OUR BUSINESS STRATEGY

Our goal is to build a global biopharmaceutical company that discovers, develops, manufactures and sells our own products to treat and cure disease. From the outset, we have had a consistent scientific and business strategy.

Focus on Protein and Antibody Drugs

A central element of our strategy is to focus exclusively on the discovery and development of protein and antibody drugs. It is our belief that protein and antibody drug discovery and development offer the fastest and most efficient means to convert knowledge of new genes to new drugs. This focus has allowed us to create an integrated infrastructure and set of assets including:

- Outstanding genomics and informatics capabilities
- A strong patent estate focused on the medical uses of new therapeutic proteins and antibody targets
- Expertise in the discovery of novel protein and antibody drug candidates
- Protein formulation technology, including advanced technologies to create long-acting protein and peptide drugs
- Current Good Manufacturing Practice (cGMP) manufacturing capabilities for protein and antibody drugs
- Clinical and regulatory expertise necessary to design and implement clinical trials of our own drugs

This collection of assets and skills provides us an advantage in terms of dexterity, speed and overall economics in moving a drug from concept to clinic. From 1997 to March 2002, we have filed Investigational New Drug (IND) applications on nine new compounds, which we believe is a record in the biopharmaceutical industry.

Developing and Marketing Our Own Drugs

Our business plan calls for bringing our own drugs to the market—to manufacture the drugs, to conduct clinical trials of the drugs in North America and overseas, and to sell the drugs. Our first drugs are very likely to be developed and marketed with large pharmaceutical or biopharmaceutical partners, to benefit from their expertise, infrastructure and experience, as well as to offset the cost of development and launch. In the future, we may bring a second set of drugs to market on our own.

JEANNE M. RILEY, VICE PRESIDENT, STRATEGIC MARKETING

Initial Genomic Partnerships

Generating near-, intermediate- and long-term revenue through partnerships to fund some of the costs of drug development has been an integral part of our business strategy. Initially, our strategy was to license early-stage technology—our genomics and informatics expertise—in return for substantial up-front payments, product development milestone payments, rights to sell approved drugs with our partners and significant royalties. Today, the partners that were part of our initial human gene consortium (1993–2001), led by GlaxoSmithKline, have initiated approximately 460 research programs based on our early-stage technology. One drug from these collaborations has entered clinical trials. There remains substantial potential value in these early partnerships.

Product-Based Partnerships

Our current business development strategy is to establish new partnerships centered on individual drugs, or sets of drugs in common therapeutic areas. Our ability to generate high-quality preclinical and early clinical candidates now exceeds our capacity to develop them independently through the later stages of human trials. Now that the initial phase of our human gene consortium agreement has ended, we are free to enter into partnerships for the majority of drug candidates described in the "Our Product Pipeline" section of this Annual Report. We will seek near-, intermediate- and long-term revenue from upfront payments and product development milestones, as well as the right to sell the products with our partners, royalties on sales, or both.

Summary

Our business strategy has already yielded a very rich product pipeline in the focused area of protein and antibody drugs. We believe we have a strong competitive advantage in this field. Our initial partnerships have already yielded substantial value and have the potential to yield more.

Our new partnership strategy, focused on establishing partnerships around specific drugs that we have already discovered, addresses the demands of the pharmaceutical industry which is hungry for new, high-quality products for significant new markets. We believe that sales of our own drugs, together with revenue from our existing and new partnerships, should allow us to achieve our goal of becoming a global biopharmaceutical company.

MIDDLE BROTHER, 1997

CRAIG A. ROSEN, PH.D., EXECUTIVE VICE PRESIDENT, RESEARCH & DEVELOPMENT

OUR PRODUCT PIPELINE

We have a rich product pipeline of clinical and advanced preclinical compounds. We divide these into six therapeutic or franchise areas: oncology, autoimmunity/immunology, diabetes/metabolism, tissue repair, osteoporosis/bone remodeling and HIV/AIDS. As of March 2002, seven of our drug candidates are in human clinical trials, and we have applied to the U.S. Food & Drug Administration to initiate clinical trials of two more. We plan to initiate clinical trials of at least two additional drugs during the calendar year 2002.

ONCOLOGY

ONCOLOGY—ANTI-TUMOR DRUGS

DRUG	USE	COMPOSITION
LymphoRad	B-cell tumors	Radiolabeled protein
TRAIL-R1 mAb	Solid tumors	Human antibody
TRAIL-R2 mAb	Solid tumors	Human antibody
Albuleukin	Solid tumors	Long-acting interleukin-2
Albuferon-alpha	Leukemias	Long-acting interferon-alpha
VEGF-2 mAb	Metastatic cancer	Human antibody

LymphoRad

LymphoRad is a radiolabeled form of B-Lymphocyte Stimulator (BLyS), a naturally occurring human protein that we discovered. LymphoRad binds to receptors that are found exclusively on B cells and B-cell tumors. Such tumors are sensitive to killing by the attached radioisotope. The recent clinical success of radiolabeled human antibodies that recognize the CD-20 receptor on B-cell tumors validates the concept of LymphoRad as an antitumor drug. Initially, LymphoRad will be tested on patients suffering from multiple myeloma. Multiple myeloma tumors display receptors for LymphoRad but generally lack the CD-20 receptor. We plan to initiate trials of LymphoRad during 2002.

TRAIL-R1 and TRAIL-R2 Receptor Antibodies

The TRAIL-R1 and TRAIL-R2 "death receptors" are found on the surface of many solid tumors. We have developed two human antibodies that trigger the death of receptor-bearing tumors. One antibody recognizes the TRAIL-R1 receptor, and the other the TRAIL-R2 receptor.

These antibodies may have an advantage over the natural TRAIL ligand, as they do not recognize so-called "decoy receptors" that are often displayed on the surface of tumors in addition to the active receptor. We plan to initiate clinical trials with at least one of these two antibodies this year. Our ultimate

DAVID C. STUMP, M.D., SENIOR VICE PRESIDENT, DRUG DEVELOPMENT

goal is to use these drugs to treat intractable tumors such as metastatic tumors of the colon, lung or breast.

Albuleukin and Albuferon-alpha

Albuleukin and Albuferon-alpha are new long-acting versions of the existing protein drugs interleukin-2 and interferon-alpha. Both drugs are active antitumor drugs. These new compounds were constructed by our scientists by fusing the gene for the existing drug to human albumin. The resulting fusion protein retains the activity of the parent compound, but may have several advantages. Both Albuleukin and Albuferon-alpha have an extended half-life in serum and may display reduced toxic effects as compared to the original drugs. Both compounds have been approved for clinical trials for the treatment of cancers. Enrollment for studies should proceed throughout 2002.

VEGF-2 Monoclonal Antibody

Vascular Endothelial Growth Factor-2 (VEGF-2) is a human protein we discovered that stimulates formation of both blood and lymph vessels. Studies in the scientific literature implicate VEGF-2 as important for the metastatic spread of breast and melanoma tumors to lymph nodes. We have developed a human monoclonal antibody that neutralizes the activity of VEGF-2 and is an active antitumor agent in preclinical studies. Additional laboratory studies in progress are designed to test the suitability of VEGF-2 monoclonal antibody as a clinical candidate.

ONCOLOGY—CANCER SUPPORTIVE CARE

DRUG	USE	COMPOSITION
Albupoietin	**Anemia**	**Long-acting erythropoietin**
Albugranin	**Neutropenia**	**Long-acting G-CSF**
Mirostipen	**Anemia/Neutropenia**	**Protein**
Repifermin	**Mucositis**	**Protein**

Albupoietin and Albugranin

Four of the ten cancer drugs in our cancer pipeline have a primary indication for supportive care of patients undergoing chemotherapy. These include Albupoietin, Albugranin, mirostipen and repifermin.

Albupoietin and Albugranin are new long-acting versions of erythropoietin and granulocyte colony stimulating factor (G-CSF) respectively. Both Albupoietin and Albugranin may help patients recover from damage to their blood-forming tissues. Albupoietin should act to restore red cell levels to combat anemia, whereas Albugranin should stimulate the replacement of missing neutrophils to help prevent infections. Preclinical studies show that

VIVIAN R. ALBERT, PH.D., DIRECTOR, ANTIBODY DISCOVERY & DEVELOPMENT

Albupoietin compares favorably both in terms of activity and half-life with both erythropoietin and the new modified version of erythropoietin called Aranesp™. The preclinical profile of Albugranin also indicates that it has a longer half-life than G-CSF, while retaining activity. This combination of activity and half-life is such that administration of one dose of the drug per round of chemotherapy may be feasible. We plan to request permission to initiate clinical trials for at least one of these drugs this year.

Mirostipen

Mirostipen is a human protein we discovered that also may be used to support patients undergoing chemotherapy and radiation therapy. Like Albupoietin and Albugranin, mirostipen may act to support the blood system of cancer patients. Preclinical studies show that mirostipen spares the hematopoietic stem cells from injury by both chemotherapy and radiation treatments for cancer. We may explore the use of mirostipen with Albugranin as a powerful combination therapy approach to this problem.

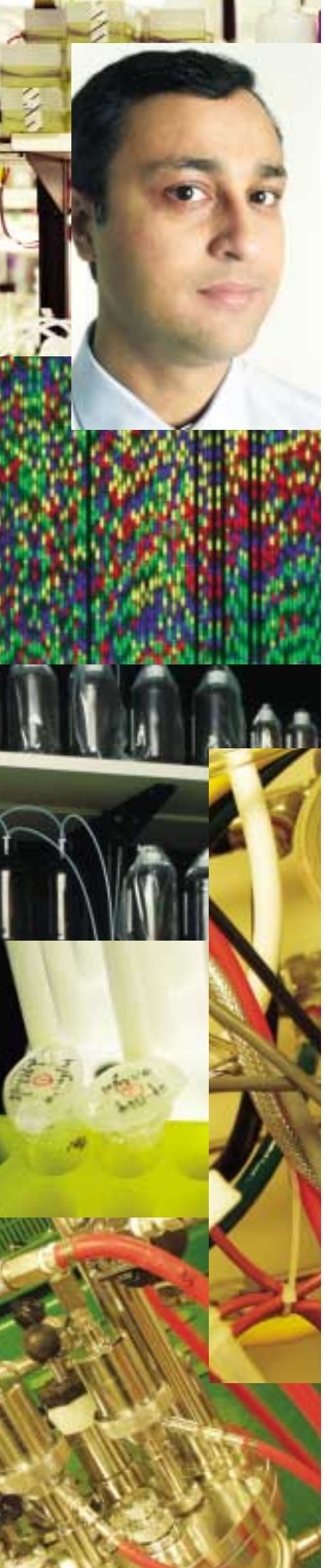
Repifermin

Repifermin is a human protein we discovered that promotes the healing of wounds to the mucosal tissue. The primary indication for this drug is the repair of wounds to the skin (see "Tissue Repair" on page 20). Our initial clinical studies of this drug showed repifermin to be both well tolerated and active in helping to heal wounds. Repifermin may also be used to protect cancer patients from damage to the mucosal tissue arising from chemotherapy and radiation treatments. Our initial Phase 2 studies of repifermin for protection of oral mucositis show the drug to be well tolerated. However, at the doses tested, no activity was demonstrated in this trial, in which the drug was administered after chemotherapy. Preclinical experiments now suggest that repifermin may be more active when given prior to mucosal injury. We are conducting a second trial of repifermin for the prevention of oral mucositis in which the drug is administered both before and after chemotherapy.

AUTOIMMUNITY AND IMMUNOLOGY

DRUG	USE	COMPOSITION
LymphoStat-B	Lupus/Arthritis	Human antibody
B-Lymphocyte Stimulator	Immunodeficiency	Protein
Albuferon-alpha	Hepatitis C	Long-acting interferon-alpha
Albuferon-beta	Multiple sclerosis	Long-acting interferon-beta

Many chronic diseases result from mis-regulation of the immune system, including autoimmune diseases as well as immunodeficiencies. Additionally,



INDRAJIT SANYAL, PH.D., SENIOR DIRECTOR, HIGH THROUGHPUT BIOLOGICAL SCREENING

the immune system may be immobilized to fight chronic infections. We are developing four drugs in this therapeutic area.

LymphoStat-B

LymphoStat-B is the human monoclonal antibody that inactivates B-Lymphocyte Stimulator (BLyS), a protein we discovered that stimulates the production of antibodies. We and others have reported in the scientific literature that some patients with systemic lupus erythematosus, severe arthritis and Sjögren's syndrome have elevated levels of BLyS in their circulation. Excessive amounts of the protein induce lupus in laboratory studies. Overproduction of autoimmune-inducing antibodies may be counteracted by reducing BLyS levels with LymphoStat-B. We have initiated clinical trials of this drug and will be enrolling lupus patients in our studies throughout the year.

B-Lymphocyte Stimulator (BLyS)

B-Lymphocyte Stimulator is a human protein we discovered that stimulates the production of increased levels of antibodies. The drug acts to increase the number and activity of antibody-producing plasma cells. We currently are treating patients with antibody deficiency diseases, including patients with common variable immunodeficiency disease (CVID) and deficiencies in one specific type of antibody, immunoglobulin-A. We have been granted orphan drug status for treatment of CVID patients with BLyS. Enrollment for these studies should proceed throughout 2002.

Albuferon-alpha and Albuferon-beta

Albuferon-alpha and Albuferon-beta are new long-acting forms of interferon-alpha and interferon-beta, respectively. The drugs were created by fusing the genes for the parent drug to that for human albumin. Preclinical studies show that both drugs are active and have longer half-lives than do the original compounds.

We have initiated human trials for Albuferon-alpha for the treatment of patients with hepatitis C. Interferon-alpha alone has been shown to be an effective antiviral drug. We hope that Albuferon-alpha will be more effective and perhaps better tolerated than interferon-alpha.

Interferon-beta has been demonstrated to be an effective treatment for patients with multiple sclerosis. However, the dosing regimen as well as the side effects of interferon-beta are less than optimal. Albuferon-beta may address patient needs in both areas. The long-acting properties of Albuferon-beta compared with the parent compound may allow less frequent dosing, while the dose schedule and sustained activity of Albuferon-beta may also reduce side effects. We are currently conducting additional preclinical tests designed to support an IND application for Albuferon-beta, perhaps this year.

DAVID M. HILBERT, PH.D., DIRECTOR, IMMUNOLOGY

DIABETES AND METABOLISM

DRUG	USE	COMPOSITION
GMAD-1	Type 1, 2 diabetes	Protein
GMAD-2	Type 1, 2 diabetes	Antibody
DP-18	Type 1, 2 diabetes	Protein
Albulin	Type 1, 2 diabetes	Long-acting insulin
Albugon	Type 1, 2 diabetes	Long-acting peptide
Albutropin	Metabolism	Long-acting hGh

Diabetes, obesity and other metabolic disorders pose serious and growing threats to health. We recently initiated systematic efforts to discover new human proteins and antibodies that could be used to treat these diseases. We now have six new drug candidates in this therapeutic area.

GMAD-1 and GMAD-2

GMAD-1 is a novel human protein that emerged from our screening programs designed to find new proteins and antibodies to treat diabetes and obesity. It affects multiple metabolic pathways involved in diabetes and obesity. GMAD-2 is a monoclonal antibody active in the same pathway as GMAD-1. We continue to explore the fundamental biology of GMAD-1 and GMAD-2 and to conduct additional preclinical experiments designed to allow us to translate this exciting discovery into new compounds that may be used to treat both diabetes and obesity.

Diabetes Protein–18

We discovered Diabetes Protein-18 (DP-18) as a result of a systematic screening of our protein library for novel drugs that have insulin-like activity. The gene for DP-18 was found to produce a protein that reduces production of glucose in liver cells and increases glucose uptake in muscle. Additionally, preclinical data show that DP-18 mimics the action of insulin as demonstrated by synergetic lowering of serum glucose levels. DP-18 also is active in lowering serum glucose levels in animals, such as the db/db mouse, that are resistant to the action of insulin itself. There is a well-recognized need for new drugs with either one or both of the activities of DP-18. We are now conducting additional preclinical experiments to examine this drug's suitability as a clinical candidate.

Albulin

There is a recognized need to establish and maintain a low basal level of insulin activity in patients with Type 1 and Type 2 diabetes. Albulin is a novel long-acting form of insulin. The drug was created by fusing the gene for human insulin to that for human albumin. In preclinical studies, Albulin is active in reducing blood glucose levels for a prolonged period. Additional

SALLY D. BOLMER, PH.D., VICE PRESIDENT, REGULATORY AFFAIRS

preclinical studies are in progress to support an IND application for this drug candidate for the treatment of Type 1 and Type 2 diabetes.

Albugon

Albugon is a long-acting form of a human peptide that has been demonstrated to lower blood glucose levels in patient and animal studies. Albugon was created by fusing a gene developed to produce an active form of the peptide to the gene for human albumin. Preclinical studies are in progress to support an IND application.

Albutropin

Albutropin is a long-acting form of human growth hormone. The drug was created by fusion of the gene for human growth hormone to that for human albumin. Albutropin has a longer half-life in serum than does growth hormone itself. Preclinical studies demonstrate that Albutropin stimulates increased serum levels of insulin-like growth factor (IGF-1), a natural messenger for the metabolic effects of growth hormone.

The primary indication of Albutropin is metabolic, for the treatment of growth hormone deficiency. We have received permission to initiate clinical trials in growth hormone-deficient adults. We also intend to evaluate Albutropin for the treatment of growth hormone-deficient children as soon as its safety has been demonstrated in adults.

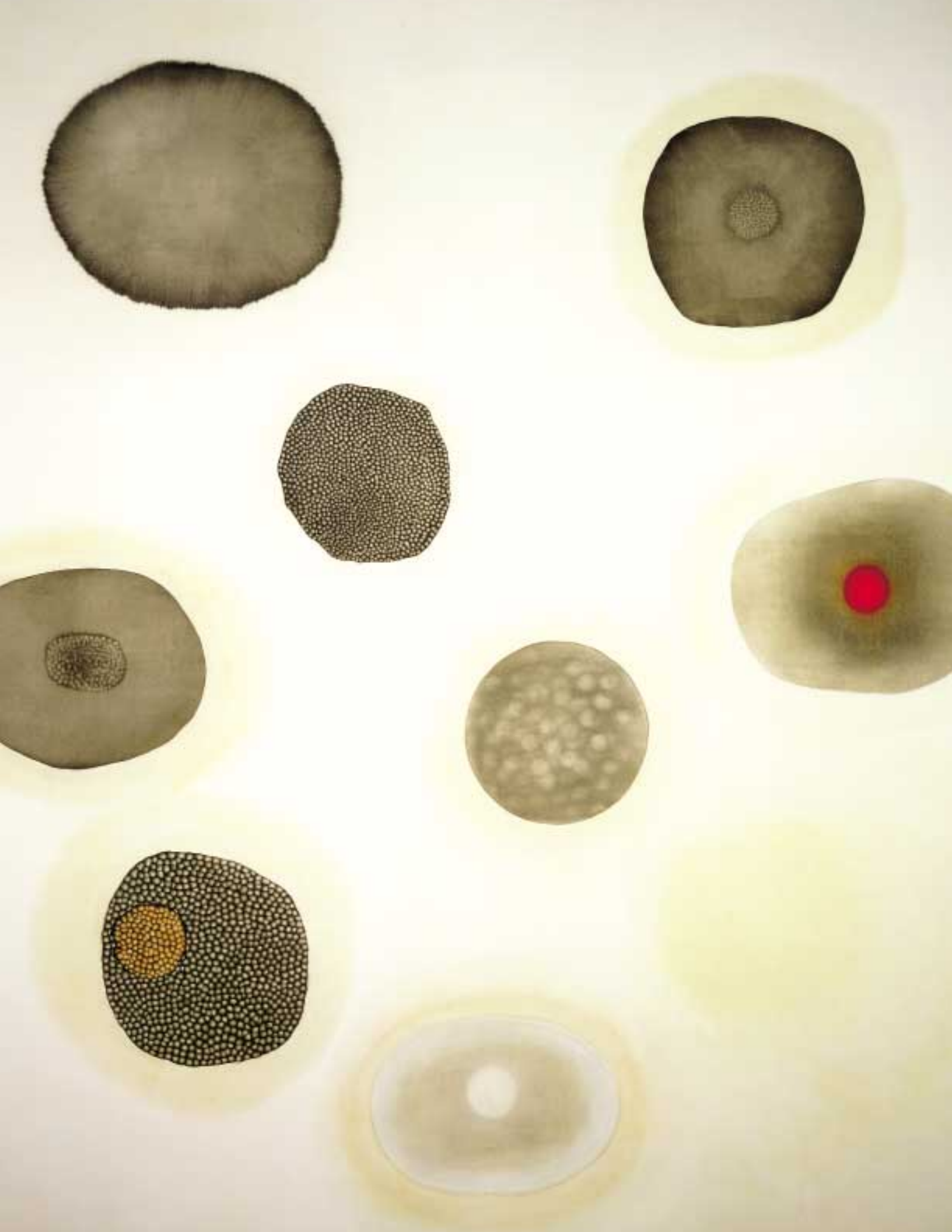
TISSUE REPAIR

DRUG	USE	COMPOSITION
Repifermin	**Skin ulcers**	**Protein**
LF-B25	**Lung diseases**	**Protein**

We are developing two drugs in the area of tissue repair, one to repair wounds to the skin and gastrointestinal tract, and a second to treat injuries to the lung. We believe that many more naturally occurring human proteins will eventually be discovered that may be used to repair a wide variety of tissue injuries.

Repifermin

Repifermin is a human protein we discovered that stimulates the repair of injured skin and mucosal tissues (see "Oncology—Cancer Supportive Care" on page 12). We have received permission to conduct clinical trials of repifermin in patients with chronic skin ulcers. Our preliminary trials demonstrated that this drug is active and well tolerated for the formation of new skin in patients with venous ulcers, when compared to a placebo control group. We are now conducting a larger clinical trial of repifermin for the treatment of venous ulcers designed to demonstrate its ability to completely heal these wounds.



VIKRAM P. PATEL, PH.D., SENIOR SCIENTIST II, PRECLINICAL DEVELOPMENT

LF-B25

LF-B25 is a human protein we discovered that is active in stimulating the growth of at least two important cell types in the lung. LF-B25 stimulates the growth of type 2 alveolar cells, leading to the possibility that it may be used to treat patients with both chronic and acute lung injury. The drug candidate also stimulates the growth of bronchial endothelial cells and may therefore be used for the treatment of patients with emphysema. We are currently exploring the range of applications for this exciting new drug candidate and are working to develop convenient and effective formulations for deep lung delivery.

OSTEOPOROSIS/BONE REMODELING

DRUG	USE	COMPOSITION
Albutegrin	**Osteoporosis**	**Long-acting protein**
Osteostat	**Osteoporosis**	**Protein**
Albutonin	**Osteoporosis**	**Long-acting calcitonin**
Albuthyrin	**Osteoporosis**	**Long-acting parathyroid hormone**

Osteoporosis is a serious and growing medical problem in the aging population. We have discovered two human proteins that may be useful for the treatment of this disease. We also have designed two long-acting forms of proteins known to affect bone metabolism.

Albutegrin

The drug candidate Albutegrin, is a long-acting form of a human protein that we discovered. The parent protein inhibits formation of osteoclasts, cells that destroy bone. Studies suggest that the protein plays an active role in inhibiting bone loss. Albutegrin was created by fusion of the gene that encodes the osteoclast inhibitory protein to that for human albumin. We judged it preferable to begin our studies with a long-acting, rather than a short-acting, form of the protein. Preclinical studies in progress are designed to support the feasibility of developing this clinical candidate.

Osteostat

Osteostat is a second human protein we discovered that inhibits formation of osteoclasts and acts by a novel mechanism distinct from that of Albutegrin. Preclinical experiments show that Osteostat plays an important role in bone metabolism. We are currently conducting additional preclinical experiments to evaluate how this new protein might be used to treat and prevent osteoporosis.

DEBORAH A. RUSSELL, D.V.M., PH.D., EXECUTIVE DIRECTOR, PRECLINICAL DEVELOPMENT

Albutonin and Albuthyrin

Albutonin and Albuthyrin are novel long-acting forms of the human peptides calcitonin and parathyroid hormone, both of which stimulate bone formation. These drugs were created by fusing a gene designed to produce the protein to the gene for human albumin. The resultant proteins possess the activity of the proteins themselves, yet have a longer serum half-life. We are conducting additional preclinical studies with both drug candidates to support separate IND applications.

HIV/AIDS

DRUG	USE	COMPOSITION
CCR5 mAb	**HIV/AIDS**	**Human antibody**
HGS-H/A 27	**HIV/AIDS**	**Long-acting protein**
Albutropin	**AIDS wasting**	**Long-acting hGh**

HIV/AIDS is a serious threat to health worldwide. The number of infected patients is rising rapidly; and strains of HIV resistant to many drugs account for up to half the infections in developed countries. New antiviral drugs to treat the disease and drugs to support AIDS patients are urgently needed.

CCR5 mAb

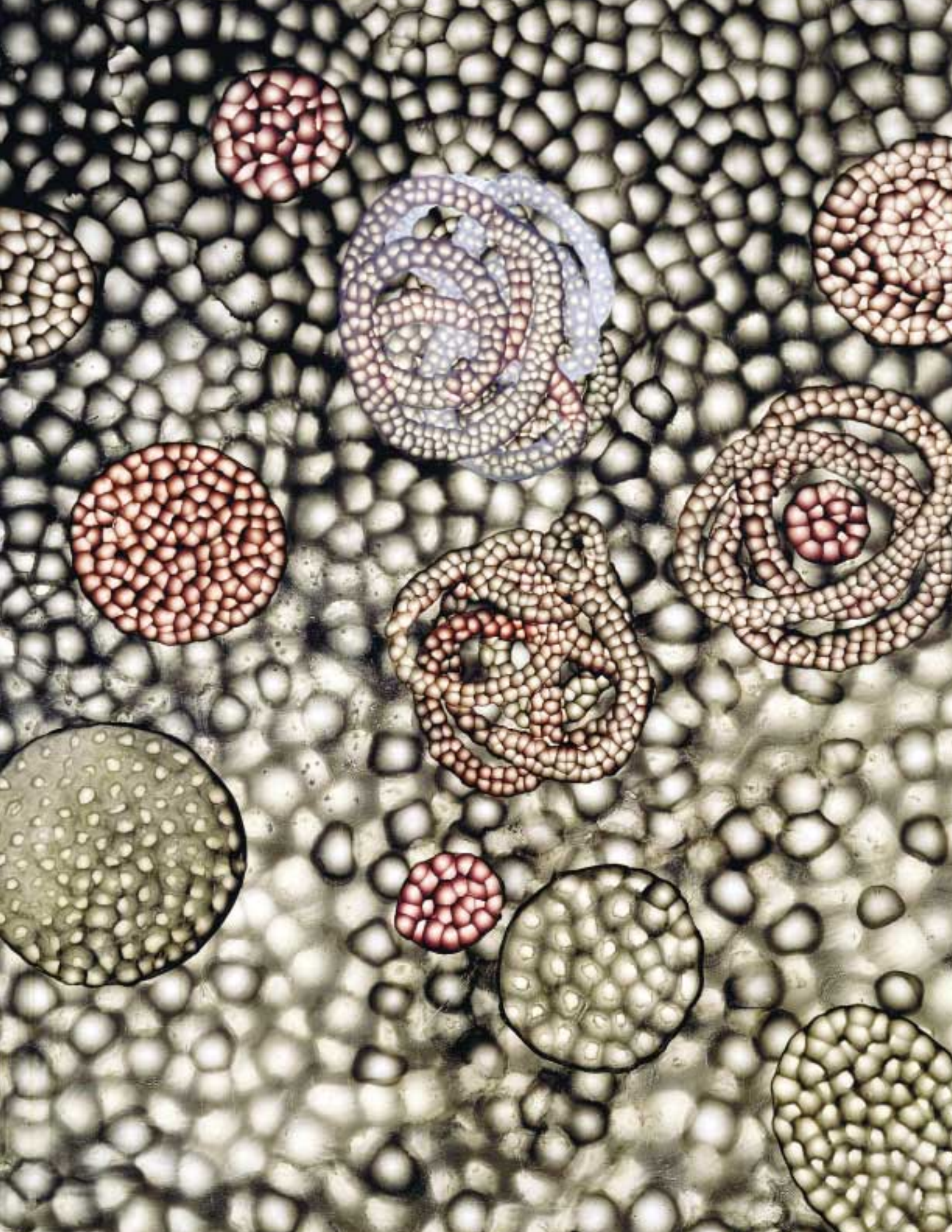
CCR5 is a human chemokine receptor that is required for HIV infection. Human Genome Sciences was the first to discover this receptor and recognize its natural function. Drugs that block binding of HIV to CCR5 block infection and therefore may be useful for treatment of the disease. We have developed a human monoclonal antibody to CCR5 that inhibits HIV infection. We are conducting preclinical trials designed to support an IND application for this candidate. The development of anti-CCR5 drugs is a competitive area associated with complex patent applications. Human Genome Sciences has been issued a patent that describes the CCR5 gene and some of its uses.

HGS-HIV/AIDS 27

HGS-HIV/AIDS 27 (HGS-H/A 27) is a long-acting version of a human protein we discovered that inhibits HIV replication. The natural form of the protein has a potent inhibitory effect on virus replication in cell culture. We created HGS-H/A 27 by fusion of the gene that encodes the HIV inhibitory protein to that for human albumin. We believe that a long-acting form of the protein may have improved antiviral properties compared to the parent compound. We are currently conducting preclinical experiments with this drug.

Albutropin

Human Growth Hormone (hGh) is approved for the treatment of AIDS wasting syndrome. A long-acting form of hGh should be attractive for this use as well.



FAZAL R. KHAN, PH.D., VICE PRESIDENT, MANUFACTURING OPERATIONS

OUR FACILITIES

Research

Execution of our business plan—to create a fully integrated biopharmaceutical company that discovers, develops, manufactures and sells our own products—requires the appropriate physical infrastructure. In 1999 and 2000, we raised substantial new capital for this purpose. We are now putting this capital to work.

We are now occupying a new research and development facility located about a half-mile from our existing research campus. After renovations are completed this spring, we plan to consolidate much of our discovery research within this facility. Over the next several years, we plan to expand the facility to support additional consolidation of our discovery activities.

Preclinical and Clinical Protein Production

We specialize in the discovery and development of protein and antibody drugs. Preparation of such compounds for preclinical and clinical studies requires highly specialized facilities. We have already built some of the required capacity, including a validated cGMP plant and related quality assurance and quality control facilities, capable of producing a limited number of protein and antibody drugs for clinical trials. We are now completing the first of a series of expansions of these facilities that will allow us to produce both larger quantities and larger numbers of protein and antibody drugs for preclinical and clinical studies. The first such expansion should be completed this spring.

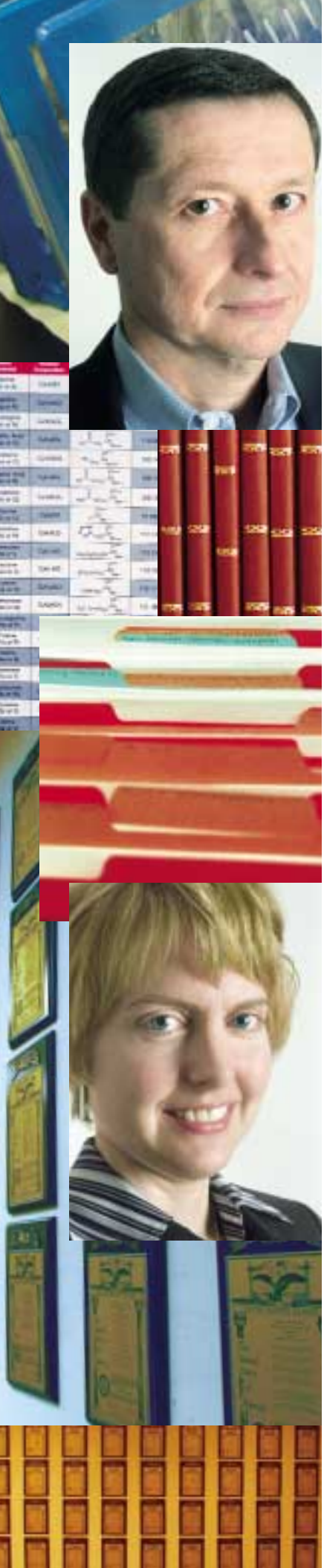
We also have initiated construction of facilities that should allow us to scale up protein and antibody production for clinical studies. These new facilities, supported by other new facilities to house our drug formulation and protein research groups, will be located in a 50-acre site located adjacent to our new research facility.

We plan to move our administrative headquarters to a building attached to these research and development facilities. The administration building will house management functions including finance, legal affairs and human resources.

Commercial-Scale Manufacturing

We are planning the construction of a commercial-scale manufacturing facility for the manufacture of both protein and antibody drugs. The facility, when operating at capacity, will be able to produce several different protein and antibody drugs simultaneously. The facility should allow us to produce sufficient amounts of our protein and antibody drugs to support the initial sales of our products in North America.

JOSEPH A. MORIN, SENIOR DIRECTOR, FACILITIES & CAPITAL PROJECTS



JAMES H. DAVIS, PH.D., J.D., SENIOR VICE PRESIDENT, GENERAL COUNSEL & SECRETARY

OUR PATENTS

Since our inception, Human Genome Sciences has recognized the importance of building a solid foundation of intellectual property to protect the investment of our shareholders and partners. We are actively pursuing patent protection for our product candidates.

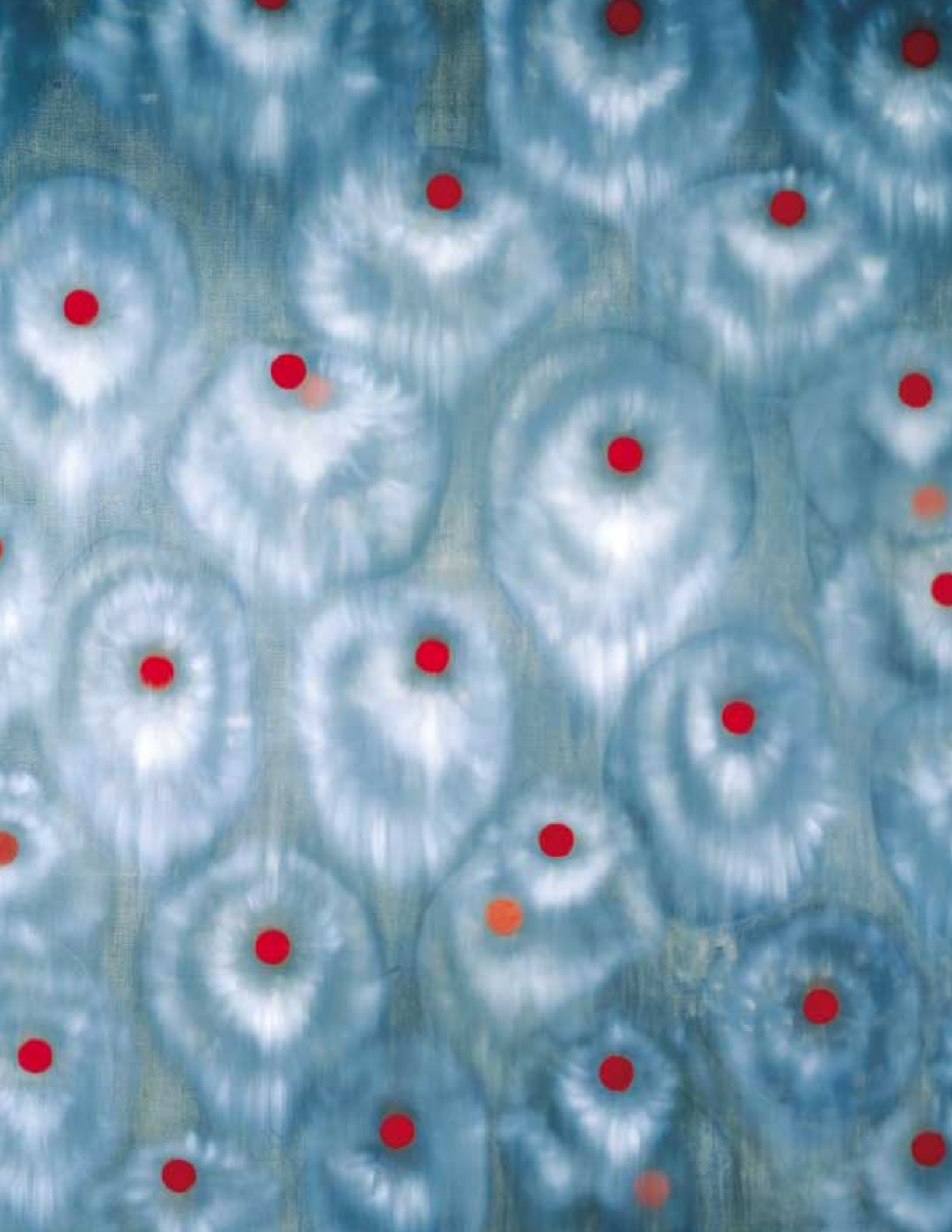
Modern societies have long recognized the importance of patents, because patents have the twin attributes of protecting innovation and stimulating new discoveries. Patents are social contracts between an inventor and society. A patent protects the work of an inventor from commercial exploitation by others, for a limited time, by affording the inventor the exclusive right to benefit commercially from the invention. In return, a patent requires the inventor to disclose the invention to the public so that others can read and learn from it and, most importantly, build upon it.

The growth of the biotechnology industry over the last two decades has been a record of startling innovation, the history of which can be read in the publication of patent applications filed by universities, pharmaceutical companies and biotechnology companies. The United States Patent and Trademark Office has consistently issued patents for inventions based on human genes and proteins for many years and continues to do so. In January 2001, the Patent Office issued new guidelines on requirements applicable to all patents but particularly relevant to patents on genes and proteins. These guidelines specifically reaffirm the patentability of newly discovered genes and proteins, provided the patent application meets the standards applicable to all inventions and discoveries.

Human Genome Sciences has filed a significant number of patent applications. We believe that each of them satisfies the Patent and Trademark Office's requirements. A large number of our patent applications have been published under the auspices of the Patent Cooperation Treaty. As of March 1, 2002, the Patent and Trademark Office had issued to Human Genome Sciences 205 patents on human gene-based inventions. Many patents describing our gene-based inventions are pending both in the United States and abroad. We believe our patent estate is one of our key assets.

JILL U. BLASY, ATTORNEY

MIDDLE BROTHER, 1997



STEVEN C. MAYER, SENIOR VICE PRESIDENT & CHIEF FINANCIAL OFFICER

OUR FINANCES

We remain in a strong financial position. We closed 2001 with a balance of $1.7 billion in cash and investments. We consumed approximately $85 million in cash for the year 2001.

We view our strong cash position as an important strategic asset. It helps us to attract and retain the best people and to broaden our discovery and development programs. It allows us to weather the storms of the capital markets, when access to additional financing may be difficult to secure. It permits us to pay our share of the costs of co-developing drugs with partners, allowing us to retain a greater portion of future product revenues. It enables us to secure the lowest cost and most flexible financing arrangements for facilities critical to our future success, while allowing Human Genome Sciences to retain its investments to generate cash for product development activities.

Our facilities financings have been structured as intermediate- to long-term operating leases funded with low cost debt. Human Genome Sciences has provided collateral in the form of investment securities to secure the financings to provide for a lower interest rate. This collateral is generally maintained at a level sufficient to purchase each facility at the end of the lease term and continues to earn interest for Human Genome Sciences. These investments are shown on our balance sheet as Restricted Investments.

Over the past year, we have made significant investments in building infrastructure and assets to achieve our goals. We strengthened and expanded our clinical and regulatory affairs teams, are occupying a new research facility, and planned for the construction of a commercial-scale manufacturing facility. As always, we seek the most efficient use of our cash assets, as we implement our goal of becoming a global biopharmaceutical company.

DOME, 1993

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Overview

We are a leading genomics and biopharmaceutical company focused on therapeutic product development and functional analysis of genes using our proprietary technology platform. We discover, develop and intend to commercialize novel compounds for treating and diagnosing human disease based on the identification and study of genes. We focus our internal product development efforts on therapeutic proteins, antibodies, peptides and fusion proteins and we use collaborations for the development of gene therapy products and small molecule drugs. We have discovered a large number of genes through our genomics capabilities and have developed a rapidly evolving product pipeline based on our discoveries.

We have seven products, including three therapeutic proteins, one antibody and three albumin fusion products that we have advanced into human clinical trials; two products are awaiting approval from FDA to enter human clinical trials; a tenth product, a gene therapy product based on a gene we discovered, has been licensed to Vascular Genetics, Inc. ("VGI") and is in human clinical trials being conducted by VGI; an eleventh product, an enzyme that lowers levels of lipoprotein-associated phospholipase A2 (Lp-PLA_2), was discovered by GlaxoSmithKline ("GSK") as part of our collaboration with GSK and is also in human clinical trials being conducted by GSK. We have a number of additional products in preclinical development.

We have extensive capabilities in gene discovery, intellectual property protection and preclinical and clinical development and have established a manufacturing capability for the preparation of our proteins, antibodies and fusion proteins for human studies. We intend to add sales and marketing as appropriate and are currently adding additional manufacturing capabilities. We have established strategic partnerships with a number of leading pharmaceutical and biotechnology companies to leverage our capabilities and gain access to complementary technologies and sales and marketing infrastructure. Some of these partnerships provide us with research funding and milestone payments, along with royalty payments as products are developed and commercialized. We are also entitled to certain co-promotion, co-development, revenue sharing and other product rights.

We have not received any product sales revenue or royalties from product sales and do not anticipate revenues from product sales or from royalties on product sales in the next several years. From inception through December 31, 2001, we have received (1) $70.0 million in revenue, $55.0 million in equity payments and $1.0 million in a milestone payment pursuant to our collaboration agreements with GlaxoSmithKline, (2) payments of $87.5 million from additional collaboration partners and (3) an aggregate of $60.8 million from other collaborators, including common stock from Transgene S.A. valued at $25.7 million, $16.0 million from Pioneer Hi-Bred International, Inc., $9.0 million from Pharmacia & Upjohn Company, $5.0 million from Schering-Plough (in addition to certain payments received from Schering-Plough pursuant to our additional collaboration partner agreements), $3.0 million from F. Hoffmann-La Roche, $1.1 million from OraVax Merieux Co. and Merieux OraVax S.N.C., and $1.0 million from MedImmune. To date, we have received all of our revenue from payments made under our collaboration agreements with GlaxoSmithKline and, to a lesser extent, other agreements. The GlaxoSmithKline collaboration agreement and many of our other collaboration agreements expired in 2001 and will only generate additional milestone and royalty payments if our collaborators successfully develop drugs based on our technology. We may not receive any of these payments and may not be able to enter into additional collaboration agreements.

We expect that our revenue sources for at least the next several years may be limited to interest income, payments under various collaboration agreements to the extent milestones are met, payments from the sale of product rights and other payments from other collaborators and licensees under existing or future arrangements, to the extent that we enter into any future arrangements. We expect to continue to incur substantial expenses relating to our research and development efforts, which are expected to increase relative to historical levels as we focus on preclinical and clinical trials required for the development of therapeutic protein, antibody and fusion protein product candidates. As a result, we expect to incur continued and increasing losses over the next several years unless we are able to realize additional revenues under existing or new collaboration agreements. The timing and amounts of such revenues, if any, cannot be predicted with certainty and will likely fluctuate sharply. Results of operations for any period may be unrelated to the

results of operations for any other period. In addition, historical results should not be viewed as indicative of future operating results.

Critical Accounting Policies and the Use of Estimates

The preparation of our financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in our financial statements and accompanying notes. Actual results could differ materially from those estimates. The items in our financial statements requiring significant estimates and judgments are as follows:

We carry our cash, cash equivalents, investments, other assets, accounts payable and accrued expenses and other accrued expenses at their respective fair values. Our other assets include deferred financing costs relating to our convertible subordinated notes. We are amortizing these costs over the life of the notes and, in the event the notes are converted to equity, we would reclassify the unamortized deferred financing costs to equity. We periodically monitor these fair values to determine if impairment write-downs are required.

We lease various real properties under operating leases that generally require us to pay taxes, insurance and maintenance. Two of our operating leases are commonly referred to as "synthetic leases." A synthetic lease is a form of off-balance sheet financing under which an unrelated third party funds 100% of the costs for the acquisition and/or construction of the property and leases the asset to the lessee, and at least 3% of the third party funds represent risk equity. Our synthetic leases are treated as operating leases for accounting purposes and financing leases for tax purposes. While we recently entered into these synthetic leases, we will periodically review the fair values of the properties being leased or constructed in order to determine potential accounting ramifications. Changes in the equity participation of the third parties could affect the classification of this lease from operating to financing. In that event, we would include both the cost and debt associated with the properties on our consolidated balance sheet. Additionally, under these leases we also provide a residual value guarantee which guarantees the lessor that the residual value of the leased assets will be at least equal to a specified amount at lease termination.

Revenue from non-refundable upfront license fees where we continue involvement through an obligation to provide access to our technology is recognized ratably over the period of obligation. Deferred revenues related to these obligations are recognized on a straight-line basis over the life of the obligation.

Revenue associated with performance milestones is recognized based on the achievement of the milestones, as defined in the respective agreements.

Research and development expenses include related salaries, contractor fees and allocated facility costs. Such costs are charged to research and development expense as incurred.

Results of Operations

Years Ended December 31, 2001 and 2000

Revenues. We had revenues of $12.8 million and $22.1 million for the years ended December 31, 2001 and December 31, 2000, respectively. The 2001 revenue consisted of the recognition of $9.2 million in license fees and additional payments from collaborations with Schering-Plough, Sanofi-Synthelabo, and Merck KGaA, the recognition of $2.6 million from the collaboration with Transgene, S.A. and $1.0 million in a milestone payment from GlaxoSmithKline. The 2000 revenue consisted of $18.5 million in license fees and additional payments from collaborations with Schering-Plough, Sanofi-Synthelabo, and Merck KGaA, the recognition of $2.6 million from the collaboration with Transgene, S.A. and $1.0 million in license revenue from MedImmune. In 2000, we implemented Securities and Exchange Commission ("SEC") Staff Accounting Bulletin No. 101, *Revenue Recognition in Financial Statements* ("SAB 101"). SAB 101 impacts our revenues pertaining to our collaborative agreements with Schering-Plough, Sanofi-Synthelabo, and Merck KGaA for both 2000 and 2001. See Note B of the Notes to Consolidated Financial Statements for additional discussion.

Expenses. Research and development expenses increased to $146.3 million for the year ended December 31, 2001 from $91.5 million for the year ended December 31, 2000, excluding the $134.1 million charge for Purchased In-Process Research and Development in 2000. We expect to continue to incur substantial expenses relating to our research and development efforts, which expenses are expected to increase relative to historical levels as we focus

on preclinical and clinical trials required for the development of our protein, antibody and fusion product candidates. We track our research and development expenditures by type of cost incurred—preclinical, clinical and manufacturing costs.

Our preclinical costs increased to $79.3 million for the year ended December 31, 2001 from $58.3 million for the year ended December 31, 2000. This increase is due primarily to expanded activities, including toxicology studies, needed to support our investigational new drug filings that were made or will be made in the future, along with expanded activities in the area of antibody development, including increased outside collaboration costs and milestone payments.

Our clinical costs increased to $27.8 million for the year ended December 31, 2001 from $11.1 million for the year ended December 31, 2000. This increase is due primarily to the cost of continuing ongoing trials from 2000 along with the cost of filing, initiating and sustaining new trials that began in 2001. We had seven drugs in eleven human clinical trials ongoing as of December 31, 2001 compared to four drugs in six human clinical trials ongoing as of December 31, 2000.

Our manufacturing costs increased to $39.2 million for the year ended December 31, 2001 from $22.1 million for the year ended December 31, 2000. This increase is due to the increased production activities within our process development and manufacturing facilities needed to support our increased clinical activities.

Purchased In-Process Research and Development expense of $134.1 million for the year ended December 31, 2000 relates to the acquisition of Principia Pharmaceutical Corporation on September 8, 2000. This amount represents that portion of the $135.1 million purchase price allocated to in-process research and development. See Note C of the Notes to Consolidated Financial Statements for additional discussion.

General and administrative expenses increased to $38.7 million for the year ended December 31, 2001 from $27.1 million for the year ended December 31, 2000 to support the increase in our activities. The increase also resulted from increased market research costs in connection with our expanding clinical activities and higher legal expenses associated with filing and prosecuting a larger number of patent applications relating to genes and proteins we discovered. Patent expenses will continue to increase as additional applications are filed and existing applications are prosecuted in the United States and internationally.

Interest income was $105.9 million for the year ended December 31, 2001 compared to $62.2 million for the year ended December 31, 2000 due to higher average cash and short-term investment balances. While we had higher average cash balances, the yield on our investments was 6.1% for the year ended December 31, 2001 as compared to 6.7% for the year ended December 31, 2000. Our average cash balance decreased during 2001 as a result of our net loss and capital expenditures in 2001, partially offset by proceeds from the issuance of stock pursuant to our stock option and employee stock purchase plans. Interest expense increased for the year ended December 31, 2001 in comparison to the year ended December 31, 2000 due primarily to a full year of interest expense in 2001 relating to the issuance of $525.0 million of convertible subordinated notes during the first quarter of fiscal 2000 partially offset by a reduction in interest expense associated with previously-issued convertible subordinated notes that were converted to equity during the first quarter of fiscal 2000.

Charge for impaired investment of $22.3 million for the year ended December 31, 2001 relates to the reduction made to the carrying value in our equity investment in Transgene, S.A. We reduced the carrying value of this investment to $3.4 million from $25.7 million due to an impairment that we deemed to be other-than-temporary. See Note D of the Notes to Consolidated Financial Statements for additional discussion.

Debt conversion expenses decreased to $3.9 million for the year ended December 31, 2001 from $50.8 million for the year ended December 31, 2000. The debt conversion expenses of $3.9 million relate primarily to the second quarter of 2001 conversion of $25.0 million aggregate principal of 5% convertible subordinated notes due 2007 into equity. The debt conversion expenses of $50.8 million relate to the first quarter of 2000 conversion costs of $318.3 million aggregate principal amount of convertible subordinated notes into equity. We converted $118.3 million of our $125.0 million aggregate principal amount of 5½% notes due 2006 into common stock at a cost of $20.8 million, substantially all of which was paid in the form of common stock. In addition, we converted all of our $200.0 million aggregate principal

amount of 5% notes due 2006 into common stock at a cost of $30.0 million, all of which was paid in cash. See Note I of the Notes to Consolidated Financial Statements for additional discussion.

Other income of $5.9 million for the year ended December 31, 2000 relates to the gain realized on the sale of 290,000 ordinary shares of our investment in Cambridge Antibody Technology. See Note D of the Notes to Consolidated Financial Statements for additional discussion.

Cumulative effect of a change in accounting principle of $8.3 million for the year ended December 31, 2000 relates to our implementation of SAB 101.

Net Income (Loss). We recorded a net loss of $117.2 million, or $0.92 per share, for the year ended December 31, 2001 compared to a net loss of $243.8 million, or $2.20 per share, for the year ended December 31, 2000. The decreased loss for 2001 compared to 2000 reflects the absence of Purchased In-Process Research and Development expense of $134.1 million, or $1.21 per share, reduction of debt conversion expenses, an increase in net interest income and the affect of the cumulative effect of a change in accounting principle recognized in 2000, partially offset by the charge for impaired investment, decreased revenue and the increase in manufacturing operations, increased investment in the development of preclinical and clinical drug candidates, and increased general and administrative activities. Excluding the charge for impaired investment incurred in 2001, the charges for debt conversion expenses for both 2001 and 2000, the Purchased In-Process Research and Development and the cumulative effect of a change in accounting principle incurred in 2000, our net loss would have been $90.9 million, or $0.72 per share for the year ended December 31, 2001, compared to $50.7 million, or $0.46 per share for the year ended December 31, 2000.

Years Ended December 31, 2000 and 1999

Revenues. We had revenues of $22.1 million and $24.5 million for the years ended December 31, 2000 and December 31, 1999, respectively. The 2000 revenue consisted of $18.5 million in license fees and additional payments from collaborations with Schering-Plough, Sanofi-Synthelabo, and Merck KGaA, the recognition of $2.6 million from the collaboration with Transgene, S.A. and $1.0 million in license revenue from MedImmune. The 1999 revenue consisted of $18.5 million in license fees and additional payments from collaborations with Schering-Plough, Sanofi-Synthelabo, and Merck KGaA, the recognition of $4.2 million from the collaborations with Transgene, S.A. and Pharmacia, and $1.8 million in other revenue. SAB 101 impacted our revenues pertaining to our collaborative agreements with Schering-Plough, Sanofi-Synthelabo, and Merck KGaA for 2000. See Note B of the Notes to Consolidated Financial Statements for additional discussion.

Expenses. Research and development expenses increased to $91.5 million for the year ended December 31, 2000 from $60.6 million for the year ended December 31, 1999, excluding the $134.1 million charge for Purchased In-Process Research and Development in 2000. We track our research and development expenditures by type of cost incurred—preclinical, clinical and manufacturing costs.

Our preclinical costs increased to $58.3 million for the year ended December 31, 2000 from $41.2 million for the year ended December 31, 1999. This increase is due primarily to expanded activities, including toxicology studies, needed to support our investigational new drug filings that were made or will be made in the future, along with expanded activities in the area of antibody development, including increased outside collaboration costs.

Our clinical costs increased to $11.1 million for the year ended December 31, 2000 from $5.4 million for the year ended December 31, 1999. This increase is due primarily to the cost of expanding our clinical trials in 2000 compared to the prior year. We had four drugs in six human clinical trials ongoing as of December 31, 2000 compared to two drugs in four human clinical trials ongoing as of December 31, 1999.

Our manufacturing costs increased to $22.1 million for the year ended December 31, 2000 from $14.0 million for the year ended December 31, 1999. This increase is due to a full year of operations for our process development and manufacturing facility in 2000, compared to 1999, when the facility commenced operations in the second quarter of 1999.

Purchased In-Process Research and Development expense of $134.1 million for the year ended December 31, 2000 relates to the acquisition of Principia Pharmaceutical Corporation on September 8, 2000.

General and administrative expenses increased to $27.1 million for the year ended December 31, 2000 from $14.8 million for the year ended December 31, 1999 to support the increase in our

activities. The increase also resulted from higher legal expenses associated with filing and prosecuting a larger number of patent applications relating to genes and proteins we discovered.

Interest income was higher for the year ended December 31, 2000 compared to the year ended December 31, 1999 due to higher average cash balances. In addition, the yield on our investments was 6.7% for the year ended December 31, 2000 as compared to 5.3% for the year ended December 31, 1999. Our average cash balance increased during 2000 as a result of the placement of two convertible subordinated note offerings during 2000, totaling $525.0 million and a public offering of common stock which raised net proceeds of $912.7 million. Interest expense increased for the year ended December 31, 2000 in comparison to the year ended December 31, 1999 due primarily to the issuance of $525.0 million of convertible subordinated notes during the first quarter of 2000.

We had debt conversion expenses of $50.8 million for the year ended December 31, 2000 but no debt conversion expenses in 1999.

Other income of $5.9 million for the year ended December 31, 2000 relates to the gain realized on the sale of 290,000 ordinary shares of our investment in Cambridge Antibody Technology. See Note D of the Notes to Consolidated Financial Statements for additional discussion.

Cumulative effect of a change in accounting principle of $8.3 million for the year ended December 31, 2000 relates to our implementation of SAB 101. As a result of the implementation of SAB 101, we recorded a charge of $8.3 million as a cumulative effect of a change in accounting principle, retroactive to January 1, 2000. See Note B of the Notes to Consolidated Financial Statements for additional discussion.

Net Income (Loss). We recorded a net loss of $243.8 million, or $2.20 per share, for the year ended December 31, 2000 compared to a net loss of $42.2 million, or $0.46 per share, for the year ended December 31, 1999. The difference in results for the years ended December 31, 2000 and 1999 is primarily due to the $134.1 million, or $1.21 per share, charge for Purchased In-Process Research and Development, the $50.8 million, or $0.46 per share, of debt conversion expenses, the $8.3 million, or $0.08 per share, charge for the cumulative effect of a change in accounting principle, higher operating expenses, and reduced collaboration partner revenues, offset by higher net interest income. Excluding the impact of the charge for Purchased In-Process Research and Development, debt conversion expenses, and the cumulative effect of a change in accounting principle, our net loss would have been $50.7 million, or $0.46 per share, compared to a net loss of $42.2 million, or $0.46 per share, for the year ended December 31, 1999.

Liquidity and Capital Resources

We had working capital of $1.5 billion at December 31, 2001 as compared to $1.7 billion at December 31, 2000. The decrease in working capital is due to our net loss and capital expenditures, along with an increase in our restricted investments, partially offset by proceeds from the issuance of common stock. Our restricted investments totaled approximately $144.9 million and $12.3 million at December 31, 2001 and 2000, respectively. Our restricted investments will increase to approximately $541.0 million by 2004 assuming the full amount of $450.0 million of lease financing is used for construction activities and our other collateral obligations remain in place. We will be required to maintain this collateral in the form of restricted investments until 2008, at which time all or a portion of the collateral may be used to satisfy our residual value guarantees under the leases or to exercise our options to acquire the related properties. As a result, this increase in restricted investments will reduce our working capital.

We expect to continue to incur substantial expenses relating to our research and development efforts, which expenses are expected to increase relative to historical levels as we focus on preclinical and clinical trials required for the development of an increasing number of therapeutic protein, antibody and fusion protein product candidates. At December 31, 2001, we had outstanding commitments for construction and equipment purchases totaling approximately $16.3 million.

The amounts of expenditures that will be needed to carry out our business plans are subject to numerous uncertainties, which may adversely affect our liquidity and capital resources. We are proceeding with numerous clinical trials, including one multi-year repifermin trial involving over 500 patients. We have several Phase I and Phase II trials underway and expect to initiate additional trials each year. Completion of these trials may extend several years

or more, but the length of time generally varies considerably according to the type, complexity, novelty and intended use of the drug candidate. We estimate that the completion periods for our Phase I, Phase II and Phase III trials could span one year, one to two years and two to four years, respectively. The duration and cost of our clinical trials are a function of numerous factors such as the number of patients to be enrolled in the trial, the amount of time it takes to enroll them and the number of clinical sites to be engaged in the trial.

We identify our potential drug candidates by conducting numerous preclinical studies. We may conduct multiple clinical trials to cover a variety of indications for each drug candidate. Based upon the results from our trials, we may elect to discontinue clinical trials for certain indications or certain drugs in order to concentrate our resources on more promising drug candidates. For example, in 2001, we announced that the results from our ulcerative colitis trials showed that our drug candidate, repifermin was safe and well-tolerated, but not shown to be effective. We are continuing to analyze the results to determine how to proceed with this indication.

We are advancing many drug candidates, including therapeutic proteins, antibodies and fusion proteins, in part, to diversify the risks associated with our research and development spending. In addition, our manufacturing plants have been designed to enable multi-product manufacturing capability. Accordingly, we believe our future financial commitments, including preclinical, clinical or manufacturing, are not substantially dependent on any single drug candidate. Should we be unable to sustain a multi-product drug pipeline, our dependence on the success of one or a few drug candidates would increase.

We must receive FDA approval to advance each of our products through each phase of clinical testing. Moreover, we must receive FDA regulatory approval to commercially launch any of our products. In order to receive such approval, the FDA must conclude that our clinical data establish safety and efficacy. We cannot be certain that we will establish sufficient safety and efficacy data to receive regulatory approval for any of our drugs.

In addition, part of our business plan includes collaborating with others. For example, GlaxoSmithKline ("GSK") is conducting human clinical trials of an enzyme discovered by GSK as part of our collaboration with GSK, that lowers levels of lipoprotein-associated phospholipase A2 (Lp-PLA_2), as a treatment for cardiovascular disease. We have no control over the progress or completion of these trials. While we received a $1.0 million payment from GSK in connection with a development milestone met by GSK during 2001, we cannot forecast with any degree of certainty the likelihood of receiving future milestone or royalty payments. We also cannot forecast with any degree of certainty whether any of our current or future collaborations will affect our drug development efforts and therefore, our capital and liquidity requirements.

Because of the uncertainties discussed above, the costs to advance our research and development projects are difficult to estimate and may vary significantly. We expect that our existing funds and interest income will be sufficient to fund our operations for the next several years. Our future capital requirements and the adequacy of our available funds will depend on many factors, including scientific progress in our research and development programs (including our preclinical and clinical product development activities), the magnitude of those programs, the ability to establish collaborative and licensing arrangements, the cost involved in preparing, filing, prosecuting, maintaining and enforcing patent claims and competing technological and market developments. There can be no assurance that any additional financing required in the future will be available on acceptable terms, if at all.

Our future liquidity and capital resources will be affected by our contractual obligations. These obligations are summarized below:

		Payments Due by Period			
Contractual Obligations	Total	One Year or Less	Two to Three Years	Four to Five Years	After Five Years
		(dollars in thousands)			
Long-term debt	$503,912	$ 444	$ 448	$ 3,120	$499,900
Capital lease obligation	743	241	502	—	—
Operating leases [1] [2]	191,647	16,057	37,365	41,692	96,533
Unconditional purchase obligations [3]	19,850	19,600	250	—	—
Long-term collaboration obligations [4]	—	—	—	—	—
Total contractual cash obligations [5]	$716,152	$36,342	$38,565	$44,812	$596,433

(1) Certain of our current or future lease payments are based upon currently applicable interest rates. See additional discussion of these facility leases below.

(2) Certain of our operating leases contain residual value guarantees relating to two facility leases described below.

(3) Our unconditional purchase obligations relate primarily to commitments for capital expenditures, consisting primarily of laboratory space build-out and equipment.

(4) Because we cannot forecast with any degree of certainty whether any of our current collaborations will require us to make future milestone or royalty payments, we have excluded these amounts from the above table.

(5) For additional discussion of our debt obligations and lease commitments, see Notes I and J of the Notes to the Consolidated Financial Statements.

During 2001, we entered into two seven-year lease agreements (the "October 2001 lease" and the "November 2001 lease") relating to research, manufacturing, and administrative space either acquired or under construction by two trusts controlled by third parties established solely for that purpose. As part of these agreements, we are required to maintain collateral, in the form of restricted investments, in amounts equal to 100% of the financed project cost for the duration of the leases.

Under these lease agreements, which we have accounted for as operating leases, we have the option to purchase the properties, during and at the end of the lease terms, at an aggregate amount of approximately $526.0 million. Alternatively, we can cause the properties to be sold to third parties. We are contingently liable for the residual value guarantee associated with each property in the event the net sale proceeds are less than the original financed costs of the facilities. The residual value guarantee for the October 2001 lease and the November 2001 lease is approximately $64.6 million and $394.8 million, respectively, assuming the full amount of the financings is used for construction activities.

The October 2001 lease relates to a research and development complex adjacent to our current corporate campus. We are leasing this property for seven years from a trust established solely for this purpose by Allfirst Bank. The trust is leasing the property from the Maryland Economic Development Corporation ("MEDCO"), which is the owner of the property. The cost of the existing property along with a building currently under construction is approximately $76.0 million. We are required to maintain collateral in the form of marketable securities equal to 100% of the financed project cost with the lending institution for the duration of the lease. The rent under this lease is currently based on a floating interest rate, but the trust can lock in a fixed interest rate at any time at our

request. To the extent the trust does not lock in a fixed interest rate, if interest rates increase, our rent obligations would also increase. If interest rates decrease, our rent obligations would decrease. As of December 31, 2001, the trust had fixed the interest rate on $56.0 million at approximately 4.5%. The remaining $20.0 million is floating based primarily on the seven-day LIBOR rate, which was approximately 1.98%, as of December 31, 2001.

We have a residual value guarantee of 85% of the total financed cost at lease termination. In the event of our default, we are responsible for 100% of the total financed cost of the project. Although the trust is responsible for servicing and repaying the debt and equity financings to various parties, we have made the residual value guarantee to the trust. This trust was established solely for this one lease. In the event the trust defaults to the lender or in the event the trust is terminated, we have the right to cure the default or exercise our option to acquire the property. At any time during the lease term, we have the option to purchase legal and/or beneficial interest in the project for 100% of the lease balance plus any unpaid indemnity amounts.

The November 2001 lease relates to the construction of our research and development and administrative main campus and a large-scale manufacturing facility. We will lease these properties for approximately five years, following an estimated two-year construction period, from a trust established solely for this purpose by BancBoston Leasing Investment, Inc. and First Union National Bank. The trust has entered into agreements with BancBoston and First Union to provide financing for construction of the properties in the aggregate amount of $450.0 million. We are required to maintain collateral in the form of marketable securities equal to 100% of the financed project cost with the lending institutions for the duration of the lease. The rent under these leases is currently based on a floating interest rate, but the trust can lock in a fixed interest rate at any time at our request. To the extent the trust does not lock in a fixed interest rate, if interest rates increase, our rent obligations would also increase. If interest rates decrease, our rent obligations would decrease. At December 31, 2001, the floating interest rate based primarily on short-term commercial paper was approximately 1.86%.

We have retained ownership of the land for the main campus component of this project. We have entered into a ground lease with the trust for the land at fair market value rates. Thereafter, rent will be reduced to a nominal amount. We will record these lease payments on our balance sheet as deferred rental income over the two-year construction period and then amortize this deferral over the remaining term (approximately five years).

We have a residual value guarantee of 87.74% of the total financed cost at lease termination. In the event of default, we are responsible for 100% of the total financed cost of the project. During the construction period, we have a residual value guarantee of 89.9% of the financed cost incurred. Although the trust is responsible for servicing and repaying the debt and equity financings to various parties, we have made the residual value guarantee to the trust. This trust was established solely for this one lease. In the event the trust defaults to the lender or in the event the trust is terminated, we have the right to cure the default or exercise our option to acquire the property. At any time during the lease term, we have the option to purchase legal and/or beneficial interest in the project for 100% of the lease balance plus any unpaid indemnity amounts.

We understand that the accounting treatment for these leases may be changed by the Financial Accounting Standards Board in 2002. In that event, we may be required to include these leased facilities and the related lease obligations on our balance sheet as assets and liabilities.

Our commitments, and their expiration dates are as follows:

		Amount of Commitment Expiration per Period			
Other Commercial Commitments	Total Amounts Committed	One Year or Less	Two to Three Years	Four to Five Years	After Five Years
		(dollars in thousands)			
Lines of credit	$ —	$ —	$ —	$ —	$ —
Standby letters of credit	—	—	—	—	—
Guarantee—October 2001 lease [1]	47,600	—	—	—	47,600
Guarantee—November 2001 lease [2]	15,013	—	—	—	15,013
Standby repurchase obligations	—	—	—	—	—
Other commercial commitments	—	—	—	—	—
Total commercial commitments	$62,613	$ —	$ —	$ —	$62,613

(1) The guarantee of 85.0% included above is based upon the loaned amount of $56.0 million as of December 31, 2001. Our guarantee will increase to approximately $64.6 million when we reach the full $76.0 million financed cost of the project at the end of the construction period.

(2) The construction-period guarantee of 89.9% included above is based upon a financed cost incurred of approximately $16.7 million as of December 31, 2001. Our post-construction guarantee will be 87.74% of financed project costs and will increase to approximately $394.8 million when we reach the full $450.0 million financed cost of the project at the end of the construction period.

As of December 31, 2001, we had net operating loss carryforwards for federal income tax purposes of approximately $477.6 million, which expire, if unused, by the year 2021. We also have available research and development tax credit and other tax credit carryforwards of approximately $25.0 million, the majority of which will expire, if unused, by the year 2021.

Our funds may be invested in U.S. Treasuries, government agency obligations, high grade debt securities and various money market instruments rated "A" or better. Such investments reflect our policy regarding the investment of liquid assets, which is to seek a reasonable rate of return consistent with an emphasis on safety, liquidity and preservation of capital.

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995

Certain statements contained in Management's Discussion and Analysis of Financial Condition and Results of Operations are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The forward-looking statements are based on our current intent, belief and expectations. These statements are not guarantees of future performance and are subject to certain risks and uncertainties that are difficult to predict. Actual results may differ materially from these forward-looking statements because of our unproven business model, dependence on new technologies, uncertainty and timing of clinical trials, ability to develop and commercialize products, dependence on collaborators for services and revenue, substantial indebtedness, intense competition, uncertainty of patent and intellectual property protection, dependence on key management, uncertainty of regulation of products, dependence on key suppliers, the impact of future alliances or transactions and other risks that may be described in this filing and our other filings with the Securities and Exchange Commission. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of today's date. We undertake no obligation to update or revise the information contained in this announcement whether as a result of new information, future events or circumstances or otherwise.

CONSOLIDATED BALANCE SHEETS

	December 31, 2001	2000
	(dollars in thousands, except for share and per share amounts)	
Assets		
Current assets:		
Cash and cash equivalents	**$ 88,319**	$ 493,867
Short-term investments	**1,456,091**	1,268,441
Prepaid expenses and other current assets	**3,988**	9,290
Total current assets	**1,548,398**	1,771,598
Long-term investments	**43,824**	93,337
Property, plant and equipment (net of accumulated depreciation and amortization)	**101,282**	38,567
Restricted investments	**144,901**	12,332
Other assets	**26,599**	32,691
TOTAL ASSETS	**$1,865,004**	$1,948,525
Liabilities and Stockholders' Equity		
Current liabilities:		
Current portion of long-term debt	**$ 444**	$ 729
Current portion of capital lease obligation	**241**	—
Accounts payable and accrued expenses	**32,915**	18,317
Accrued payroll and related taxes	**5,600**	3,820
Deferred revenues	**2,568**	11,818
Total current liabilities	**41,768**	34,684
Long-term debt, net of current portion	**503,468**	533,146
Capital lease obligation, net of current portion	**502**	—
Deferred revenues	**12,839**	15,407
Other liabilities	**1,964**	2,333
Total liabilities	**560,541**	585,570
Stockholders' Equity:		
Preferred stock—$0.01 par value; shares authorized—20,000,000 at December 31, 2001 and 2000; no shares issued	**—**	—
Common stock—$0.01 par value; shares authorized—400,000,000 and 250,000,000 at December 31, 2001 and 2000, respectively; shares issued 128,278,407 and 125,192,544 at December 31, 2001 and 2000, respectively	**1,283**	1,252
Additional paid-in capital	**1,753,235**	1,698,384
Unearned portion of compensatory stock options	**(294)**	(192)
Accumulated other comprehensive income (loss)	**32,070**	28,190
Retained deficit	**(481,831)**	(364,679)
Total stockholders' equity	**1,304,463**	1,362,955
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	**$1,865,004**	$1,948,525

The accompanying Notes to Consolidated Financial Statements are an integral part hereof.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2001	2000	1999
	(dollars in thousands, except for share and per share amounts)		
Revenue—research and development collaborative contracts:			
Third parties	**$ 10,250**	$ 19,500	$ 20,280
Related parties	**2,568**	2,568	4,244
Total revenue	**12,818**	22,068	24,524
Costs and expenses:			
Research and development:			
Direct expenditures	**146,276**	91,456	60,607
Purchased in-process research and development	**—**	134,050	—
Total research and development	**146,276**	225,506	60,607
General and administrative	**38,714**	27,083	14,838
Total costs and expenses	**184,990**	252,589	75,445
Income (loss) from operations	**(172,172)**	(230,521)	(50,921)
Interest income	**105,866**	62,235	13,307
Interest expense	**(24,638)**	(22,088)	(4,330)
Charge for impaired investment	**(22,314)**	—	—
Debt conversion expenses	**(3,894)**	(50,818)	—
Other income	**—**	5,861	—
Income (loss) before taxes and cumulative effect of change in accounting principle	**(117,152)**	(235,331)	(41,944)
Provision for income taxes	**—**	225	225
Income (loss) before cumulative effect of change in accounting principle	**(117,152)**	(235,556)	(42,169)
Cumulative effect of change in accounting principle	—	(8,250)	—
Net income (loss)	**$(117,152)**	$(243,806)	$(42,169)
Basic and diluted net income (loss) per share:			
Before cumulative effect of change in accounting principle	**$ (0.92)**	$ (2.12)	$ (0.46)
Cumulative effect of change in accounting principle	—	(0.08)	—
Basic and diluted net income (loss) per share	**$ (0.92)**	$ (2.20)	$ (0.46)
Weighted average shares outstanding, basic and diluted	**126,990,788**	110,929,292	92,051,988
Pro forma amounts assuming the accounting change is applied retroactively:			
Net income (loss)		$(235,556)	$(42,169)
Net income (loss) per share, basic and diluted		$ (2.12)	$ (0.46)

The accompanying Notes to Consolidated Financial Statements are an integral part hereof.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Unearned Portion of Compensatory Stock Options	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Deficit)	Total
			(dollars in thousands, except for shares)				
Balance—December 31, 1998	90,988,752	$ 910	$ 284,853	$(110)	$ 1,899	$ (78,704)	$ 208,848
Comprehensive income (loss):							
Net loss	—	—	—	—	—	(42,169)	(42,169)
Unrealized loss on investments	—	—	—	—	(11,880)	—	(11,880)
Comprehensive income (loss)							(54,049)
Exercises relating to employee stock option plan	2,291,604	23	14,073	—	—	—	14,096
Warrants exercised	29,900	—	—	—	—	—	—
Compensatory stock options issued	4,000	—	398	(398)	—	—	—
Compensatory stock options earned	—	—	—	173	—	—	173
Balance—December 31, 1999	93,314,256	933	299,324	(335)	(9,981)	(120,873)	169,068
Comprehensive income (loss):							
Net loss	—	—	—	—	—	(243,806)	(243,806)
Unrealized gain on investments	—	—	—	—	38,171	—	38,171
Comprehensive income (loss)							(205,635)
Issuance of common stock pursuant to the public offering (net of expenses)	12,650,000	127	912,531	—	—	—	912,658
Issuance of common stock pursuant to conversion of convertible subordinated notes	15,158,568	151	328,197	—	—	—	328,348
Issuance of common stock pursuant to acquisition of Principia Pharmaceutical Corporation	1,582,204	16	134,752	—	—	—	134,768
Exercises relating to employee stock option plan	2,480,240	25	23,506	—	—	—	23,531
Warrants exercised	7,276	—	1	—	—	—	1
Compensatory stock options issued	—	—	73	(73)	—	—	—
Compensatory stock options earned	—	—	—	216	—	—	216
Balance—December 31, 2000	125,192,544	1,252	1,698,384	(192)	28,190	(364,679)	1,362,955
Comprehensive income (loss):							
Net loss	—	—	—	—	—	(117,152)	(117,152)
Unrealized gain on investments	—	—	—	—	3,880	—	3,880
Comprehensive income (loss)							(113,272)
Issuance of common stock pursuant to conversion of convertible subordinated notes	782,167	8	32,153	—	—	—	32,161
Exercises of 2,284,752 and 18,944 options relating to employee stock option and stock purchase plans, respectively	2,303,696	23	22,371	—	—	—	22,394
Compensatory stock options issued	—	—	327	(327)	—	—	—
Compensatory stock options earned	—	—	—	225	—	—	225
Balance—December 31, 2001	**128,278,407**	**$1,283**	**$1,753,235**	**$(294)**	**$ 32,070**	**$(481,831)**	**$1,304,463**

The accompanying Notes to Consolidated Financial Statements are an integral part hereof.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2001	2000	1999
		(dollars in thousands)	
Cash flows from operating activities:			
Net income (loss)	**$ (117,152)**	$ (243,806)	$ (42,169)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Accrued interest on short-term and restricted investments	**1,016**	(17,562)	(795)
Depreciation and amortization	**13,237**	10,400	7,102
Charge for impaired investment	**22,314**	—	—
Purchased in-process research and development	**—**	134,050	—
Inducement costs paid in the form of common stock	**3,875**	19,433	—
Cumulative effect of change in accounting principle	**—**	8,250	—
Gain on sale of long-term investment	**—**	(5,861)	—
Loss due to disposal and write-down of property, plant and equipment	**382**	35	45
Compensation expense related to stock options	**225**	216	173
Changes in operating assets and liabilities:			
Prepaid expenses and other current assets	**4,450**	(4,146)	1,105
Other assets	**3,034**	(14,638)	(2,059)
Accounts payable and accrued expenses	**5,866**	8,513	1,926
Accrued payroll and related taxes	**1,780**	1,356	(20)
Deferred revenues	**(11,818)**	(2,568)	(4,265)
Other liabilities	**(369)**	1,879	118
Net cash provided by (used in) operating activities	**(73,160)**	(104,449)	(38,839)
Cash flows from investing activities:			
Capital expenditures—property, plant and equipment	**(64,110)**	(18,539)	(10,796)
Purchase of short-term investments and marketable securities	**(1,315,776)**	(1,196,064)	(210,646)
Proceeds from sale and maturities of short-term investments and marketable securities	**1,155,866**	226,905	100,967
Purchase of long-term investments	**—**	(54,744)	—
Proceeds from sale of long-term investment	**—**	15,368	—
Acquisition, net of acquired cash	**—**	875	—
Net cash provided by (used in) investing activities	**(224,020)**	(1,026,199)	(120,475)
Cash flows from financing activities:			
Proceeds from issuance of long-term debt, (net of expenses)	**—**	508,701	315,250
Repayment of long-term debt	**(1,368)**	(520)	(444)
Restricted investments	**(129,394)**	(695)	(4,888)
Proceeds from issuance of common stock (net of expenses)	**22,394**	936,190	14,096
Net cash provided by (used in) financing activities	**(108,368)**	1,443,676	324,014
Net increase (decrease) in cash and cash equivalents	**(405,548)**	313,028	164,700
Cash and cash equivalents—beginning of year	**493,867**	180,839	16,139
Cash and cash equivalents—end of year	**$ 88,319**	$ 493,867	$ 180,839
Supplemental disclosures of cash flow information:			
Cash paid during the year for:			
Interest	**$ 22,795**	$ 41,736	$ 3,780
Income taxes	**$ 75**	$ 200	$ 250

SUPPLEMENTAL SCHEDULE OF NON-CASH FINANCING ACTIVITIES

(dollars in thousands)

In December 2001, the Company entered into a capital lease for computer equipment with an aggregate value of $763, with thirty-six monthly payments of $23 of principal and interest. No lease payments were made in 2001.

In June 2001, the Company converted $25,000 of 5% Convertible Subordinated Notes Due 2007 into common stock and incurred $3,875 in inducement costs paid in the form of common stock as an inducement to convert. In addition, the Company reclassified $673 of unamortized debt financing costs associated with these notes to stockholders' equity as part of the conversion.

During 2001, the Company converted an aggregate of $3,595 of 5½% Convertible Subordinated Notes Due 2006 into common stock and incurred $19 in inducement costs paid in the form of cash as an inducement to convert. In addition, the Company reclassified $78 of unamortized debt financing costs associated with these notes to stockholders' equity as part of the conversion.

In January 2000, the Company converted $118,285 of 5½% Convertible Subordinated Notes Due 2006 into common stock and incurred $19,433 in inducement costs paid in the form of common stock as an inducement to convert. In addition, the Company reclassified $3,470 of unamortized debt financing costs associated with these notes to stockholders' equity as part of the conversion.

In March 2000, the Company converted $200,000 of 5% Convertible Subordinated Notes Due 2006 into common stock. In connection with this conversion, the Company made a $30,000 cash "make-whole" payment. In addition, the Company reclassified $6,000 of unamortized debt financing costs associated with these notes to stockholders' equity as part of the conversion.

The accompanying Notes to Consolidated Financial Statements are an integral part hereof.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(dollars in thousands, except share and per share data)

(Note A)—The Company

Human Genome Sciences, Inc. (the "Company") was incorporated and commenced operations on June 26, 1992. The Company is a leader in the genomics and biopharmaceutical industry focused on therapeutic product development and functional analysis of genes using its proprietary technology platform. The Company discovers, develops and intends to commercialize novel compounds for treating and diagnosing human disease based on the identification and study of genes. The Company focuses its internal product development efforts on therapeutic proteins, antibodies, peptides and fusion proteins and uses collaborations for the development of gene therapy products and small molecule drugs. The Company has discovered a large number of genes through its genomics capabilities and has developed a rapidly evolving product pipeline based on its discoveries. The Company's revenues are currently derived from license fees and research payments under collaboration agreements. The Company does not yet generate any revenues from product sales.

(Note B)—Summary of Significant Accounting Policies

Use of Estimates

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

Principles of Consolidation

The consolidated financial statements include the accounts of Human Genome Sciences, Inc. and its subsidiaries. All significant intercompany accounts and transactions have been eliminated.

Cash Equivalents and Short-Term Investments

The Company considers all highly liquid investment instruments purchased with a maturity of three months or less to be cash equivalents.

The Company classifies its short-term investments into the categories: "held-to-maturity" and "available-for-sale," each of which has different accounting treatment. Investments in securities that are classified as available-for-sale and have readily determinable fair values are measured at fair market value in the balance sheets, and unrealized holding gains and losses for these investments are reported as a separate component of stockholders' equity until realized. Debt securities classified as held-to-maturity securities are carried at amortized cost. See Note D, Investments, for additional information.

Investment Risk

The Company has invested its cash in obligations of the U.S. Government and in high-grade corporate debt securities and various money market instruments. The Company's investment policy limits investments to certain types of instruments issued by institutions with credit ratings of "A" or better, and places restrictions on maturities and concentration by type and issuer.

Investments

Investments in which the Company has the ability to exercise significant influence over the investee, but less than a controlling voting interest, are accounted for under the equity method of accounting. Under the equity method of accounting, the Company's share of the investee's earnings or losses are included in operations, to the extent the Company has an investment or receivable from the investee company recorded as an asset plus the amount of any continuing commitment to fund the investee.

The Company's investment in Ciphergen Biosystems, Inc. ("Ciphergen") was accounted for under the cost method during the year ended December 31, 1999 and for the three months ended March 31, 2000 and June 30, 2000 because the Company owned a less than a 20% equity interest, did not have significant influence and the market value of the investees' common stock was not readily determinable (i.e., a privately held company). On September 29, 2000, Ciphergen successfully completed an initial public offering of its common stock. As of that date, the Company has accounted for its investment in Ciphergen as an available-for-sale security.

Depreciation and Amortization
Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets as follows:

Laboratory equipment	3–10 years
Computers and EDP equipment	3 years
Furniture and office equipment	3–5 years
Leasehold improvements	lesser of the lease term or the useful life

Impairment of Long-Lived Assets
Periodically, management determines whether any property and equipment or any other assets have been impaired based on the criteria established in Statement of Financial Accounting Standards ("SFAS") No. 121, *Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to be Disposed Of* ("SFAS No. 121").

Fair Value of Financial Instruments
The carrying amounts for the Company's cash and cash equivalents, investments, other assets, accounts payable and accrued expenses and other accrued expenses reflected in the consolidated balance sheet at December 31, 2001 approximate their respective fair values.

Stock-Based Compensation
The Company accounts for its stock-based compensation in accordance with the provisions of APB No. 25, *Accounting for Stock Issued to Employees* ("APB No. 25") and has provided the pro forma disclosures of net loss and net loss per share in accordance with SFAS No. 123, *Accounting for Stock-Based Compensation* ("SFAS No. 123") using the fair value method. Under APB No. 25, compensation expense is based on the difference, if any, on the date of the grant between the fair value of the Company's stock and the exercise price of the option and is recognized ratably over the vesting period of the option. The Company accounts for equity instruments issued to nonemployees in accordance with SFAS No. 123 and EITF 96-18, *Accounting for Equity Instruments* that are issued to other than employees for acquiring, or in conjunction with selling goods or services. See Note K, Stockholders' Equity, for further information.

Revenue Recognition
Collaborative research and development agreements provide for periodic license fees, research payments, additional payments and milestone payments. License fees, research payments, and additional payments are recognized ratably over the term of the agreement or as milestones are achieved. Payments received in advance of work performed are recorded as deferred revenue.

The Company previously recognized nonrefundable fees for certain arrangements entered into during 1996 as revenue when payments became due and when all significant contractual obligations of the Company relating to the fees had been fulfilled. Effective January 1, 2000, the Company changed its method of accounting for nonrefundable fees related to these certain arrangements to recognize such fees monthly over the term of the related research collaboration agreement. The Company believes the change in accounting principle is required based on interpretations provided in Securities and Exchange Commission ("SEC") Staff Accounting Bulletin No. 101, *Revenue Recognition in Financial Statements* ("SAB 101"). See Change in Accounting Principle within Note B for additional discussion.

Research and Development
Research and development costs are charged to expense as incurred.

Financing Costs Related to Long-term Debt
Costs associated with obtaining long-term debt are deferred and amortized over the term of the related debt.

Patent Application Costs
Patent application costs are charged to expense as incurred.

Net Income (Loss) Per Share
The Company follows the provisions of SFAS No. 128, *Earnings Per Share*, which requires the Company to present basic and fully diluted earnings per share. The Company's basic and fully diluted loss per share are calculated by dividing the net loss by the weighted average number of shares of common stock outstanding during all periods presented.

Comprehensive Income (Loss)
SFAS No. 130, *Reporting Comprehensive Income*, requires unrealized gains or losses on the Company's available-for-sale short-term securities, and on the Company's long-term investments in Transgene S.A., Cambridge Antibody Technology and Ciphergen Biosystems to be included in other comprehensive income.

Comprehensive income (loss) included unrealized gains (losses) on the following:

	Unrealized Gain (Loss) Year Ended December 31,		
	2001	2000	1999
Available-for-sale short-term investments	**$ 27,904**	$ 8,781	$ (2,361)
Transgene	**(9,032)**	(5,313)	(9,519)
Cambridge Antibody Technology	**(39,352)**	32,854	—
Ciphergen Biosystems	**(1,129)**	1,849	—
Available-for-sale restricted investments	**3,175**	—	—
Subtotal	**(18,434)**	38,171	(11,880)
Impairment loss to investment in Transgene	**22,314**	—	—
Total unrealized gain (loss)	**$ 3,880**	$38,171	$(11,880)

During the fourth quarter of 2001, the Company recorded an impairment charge relating to its investment in Transgene in the amount of $22,314 and reversed the previously-recorded unrealized loss relating to this investment. As a result, the Company had an adjusted cost of $3,365 as determined by the market value of Transgene's publicly-traded common stock as of December 31, 2001 and no unrealized loss as of this same date. See Note D, Investments, for additional discussion.

Change in Accounting Principle

During the fourth quarter of 2000, the Company implemented SAB 101. SAB 101 provides guidance related to revenue recognition based on interpretations and practices followed by the SEC. SAB 101 requires revenues to be recognized ratably over the life of a contract period whereas previously, the Company generally recognized revenue as nonrefundable cash payments were made assuming no significant obligations remained. It requires companies to report any changes in revenue recognition as a cumulative effect of a change in accounting principle at the time of implementation in accordance with APB No. 20, *Accounting Changes*.

Historically, the Company has recognized nonrefundable license fees, research payments, additional payments and milestone payments in connection with collaboration agreements when the revenue is earned in accordance with the applicable performance requirements and/or contractual terms. This revenue recognition policy was applicable to certain multi-year agreements the Company entered into with Schering-Plough, Sanofi-Synthelabo and Merck KGaA during 1996 (the "1996 Agreements"). The Company recognized revenue under these agreements when it had performed all significant obligations and the customer was obligated to pay. The Company generally considered any remaining performance obligation, such as maintaining access to its genomic databases, as insignificant. However, SAB 101 provides guidance that indicates revenue recognition over the collaboration term is generally the required treatment for all fees, regardless of the significance of remaining performance obligations.

As a result of the implementation of SAB 101, the Company recorded a charge of $8,250, or $0.08 per share, as a cumulative effect of a change in accounting principle, retroactive to January 1, 2000. This amount represents that portion of revenue recognized in 1999 for which the contract periods of the 1996 Agreements extended into 2000. The implementation of SAB 101 had no effect on the Company's revenue for the year ended December 31, 2000. Had the change in accounting been adopted as of January 1, 1999, the Company's loss for the year ended December 31, 1999 would have increased by $8,250, or $0.09 per share. As a result of the implementation of SAB 101, the Company had additional deferred revenue as of December 31, 2000 in the amount of $8,250. The Company recorded this amount as revenue ratably over the first two quarters of 2001.

Pro forma financial information presented in the Consolidated Statements of Operations was calculated assuming the accounting change was applied retroactively to the periods presented.

Recent Accounting Pronouncements

In June 2001, the Financial Accounting Standards Board issued SFAS No. 141, *Business Combinations* ("SFAS No. 141") and No. 142, *Goodwill and Other Intangible Assets* ("SFAS No. 142"), effective for the fiscal years beginning after December 15, 2001. Under the new rules, goodwill and intangible assets deemed to have indefinite lives will no longer be amortized but will be subject to annual impairment tests in accordance with these pronouncements. Other intangible assets will continue to be amortized over their useful lives. The Company does not expect adoption of SFAS No. 141 or 142 to have a material effect on its financial condition, results of operations or liquidity.

In August 2001, the Financial Accounting Standards Board issued SFAS No. 144, *Accounting for Impairment or Disposal of Long-Lived Assets* ("SFAS 144"), which addresses financial accounting and reporting for the impairment or disposal of long-lived assets and supercedes SFAS No. 121 and APB No. 30, *Reporting the Results of Operations*. SFAS No. 144 is effective for fiscal years beginning after December 15, 2001. The Company does not expect adoption of SFAS No. 144 to have a material effect on its financial condition, results of operations or liquidity.

Sources of Supply

The Company is currently able to obtain its chemicals and equipment from various sources, and therefore, has no dependence upon a single supplier. The Company is currently dependent upon one manufacturer, MDS Nordion of Ottawa, Canada, for the radiolabeling of LymphoRad^{131}, a product for which the Company has filed an Investigation New Drug application with the FDA. No assurance can be given that the Company will be able to continue to obtain commercial quantities of this product at costs that are not economically prohibitive.

Reclassifications

Certain balances have been reclassified to conform to 2001 presentation.

(Note C)—Acquisition of Principia Pharmaceutical Corporation

On September 8, 2000, the Company acquired all of the outstanding shares of capital stock of Principia Pharmaceutical Corporation ("Principia") from its stockholders. The cost of the acquisition was $135,071, including fees and expenses. The purchase price was paid with 1,582,204 shares of the Company's Common Stock. The Company valued the shares of the Company's common stock at $82.23 per share, which the Company estimates as the fair market value of its common stock on the acquisition date. The consolidated financial statements include the results of operations of Principia since the date of acquisition. In addition, the Company issued 49,364 incentive stock options at a weighted-average exercise price of $0.91 to replace the Principia options that were outstanding as of the date of the acquisition. The options were valued at approximately $4,000 using the Black-Scholes option-pricing model.

The acquisition has been accounted for as a purchase and, accordingly, the purchase price has been allocated to the assets and liabilities acquired at their estimated fair values as of the date of acquisition. Of the purchase price, $521 was allocated to Principia's net assets, and the remainder was allocated as follows:

Purchased In-Process Research and Development	$134,050
Assembled Workforce	$ 500

The charge of $134,050 for Purchased In-Process Research and Development was recorded as an expense in the Company's results of operations for the year ended December 31, 2000. The Purchased In-Process Research and Development was analyzed through an independent third-party valuation using the expected cash flow approach to valuation.

The Company's unaudited pro forma consolidated condensed statements of operations information for the year ended December 31, 2000 and 1999, assuming the acquisition of Principia was effected at the beginning of each period, and including the one-time write-off of the Purchased In-Process Research and Development, are summarized as follows:

	Year Ended December 31,	
	2000	1999
Revenue	$ 22,068	$ 24,524
Net loss	$(247,068)	$(44,587)
Weighted average shares outstanding, basic and diluted	112,378,738	93,634,192
Net income (loss) per share, basic and diluted	$ (2.20)	$ (0.48)

This pro forma information does not purport to be indicative of the results which may have been obtained had the acquisition been consummated at the date assumed.

During the first quarter of 2001, the Company announced its decision to relocate Principia's operations from Norristown, Pennsylvania to the Company's Rockville, Maryland location. As a result, the Company recorded a one-time charge of approximately $1,950 in unit closure costs in the first quarter of 2001. Because most of the Principia employees chose not to relocate, this one-time charge included a write-off of $427, representing the remaining book value of the Assembled Workforce. During 2001, the Company incurred approximately $341 in personnel relocation costs which were charged to the consolidated statement of operations. As of December 31, 2001, the unit closure reserve had a balance of approximately $1,250.

(Note D)—Investments

Investments, including accrued interest, at December 31, 2001 and 2000 were as follows:

	December 31, 2001			
Available for Sale	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury and agencies	**$ 246,338**	**$ 6,629**	**$ (234)**	**$ 252,733**
Corporate debt securities	**1,175,080**	**28,967**	**(689)**	**1,203,358**
Subtotal—Short-term investments	**1,421,418**	**35,596**	**(923)**	**1,456,091**
Investment in Transgene, S.A.	**3,365**	**—**	**—**	**3,365**
Investment in Cambridge Antibody Technology	**45,237**	**—**	**(6,498)**	**38,739**
Investment in Ciphergen Biosystems	**1,000**	**720**	**—**	**1,720**
Subtotal—Long-term investments	**49,602**	**720**	**(6,498)**	**43,824**
Cash and cash equivalents	**29,081**	**—**	**—**	**29,081**
U.S. Treasury and agencies	**20,692**	**827**	**(15)**	**21,504**
Corporate debt securities	**91,953**	**2,418**	**(55)**	**94,316**
Subtotal—Restricted investments	**141,726**	**3,245**	**(70)**	**144,901**
Total	**$1,612,746**	**$39,561**	**$(7,491)**	**$1,644,816**

	December 31, 2000			
Available for Sale	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury and agencies	$ 157,688	$ 1,200	$ (18)	$ 158,870
Corporate debt securities	1,103,984	7,775	(2,188)	1,109,571
Subtotal—Short-term investments	1,261,672	8,975	(2,206)	1,268,441
Investment in Transgene, S.A.	25,679	—	(13,282)	12,397
Investment in Cambridge Antibody Technology	45,237	32,854	—	78,091
Investment in Ciphergen Biosystems	1,000	1,849	—	2,849
Subtotal—Long-term investments	71,916	34,703	(13,282)	93,337
Restricted investments—cash and cash equivalents	12,332	—	—	12,332
Total	$1,345,920	$43,678	$(15,488)	$1,374,110

During the fourth quarter of 2001, the Company determined that its investment in Transgene, S.A. had incurred an other-than-temporary impairment, and accordingly, made an adjustment to the carrying value of this asset. As a result, the amortized cost for this investment has been reduced by $22,314 from $25,679 to $3,365, which was the fair market value of the investment as of December 31, 2001. The adjustment of $22,314 has been recorded as a charge in the consolidated statement of operations.

During 2001, the Company entered into two seven-year lease agreements (the "October 2001 lease" and the "November 2001 lease") relating to research, manufacturing, and administrative space either acquired or under construction by two trusts established solely for that purpose. The total financed cost of the facilities covered under the October 2001 lease and the November 2001 lease is approximately $76,000 and $450,000, respectively. By the conclusion of the construction period, the Company will be required to restrict investments equal to the full amount of the financed project costs, approximately $526,000 as collateral for the duration of the leases, assuming the full amount of the leases is used for construction purposes. In addition, the Company's restricted investments as collateral for the existing process development and manufacturing facility are $12,787 as of December 31, 2001 and with accrued interest, increase to $15,000, bringing the total collateral requirements of the Company to $541,000. At December 31, 2001, the Company had pledged $144,901 in connection with these leases, which is classified as restricted investments on the consolidated balance sheet.

The following table summarizes maturities of our investment securities at December 31, 2001:

	Short-Term Investments		Restricted Investments	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Less than one year	$ 175,499	$ 177,978	$ 51,667	$ 52,000
Due in one to two years	521,822	536,085	46,825	48,644
Due in three to five years	712,125	729,969	40,517	41,484
Due after five years	11,972	12,059	2,717	2,773
Total	$1,421,418	$1,456,091	$141,726	$144,901

The Company's short-term investments include mortgage-backed securities with an aggregate cost of $174,610 and an aggregate fair value of $177,679 at December 31, 2001. The Company's restricted investments include mortgage-backed securities with an aggregate cost of $13,464 and an aggregate fair value of $13,796 at December 31, 2001. These securities have no single maturity date and accordingly, have been allocated on a pro rata basis to each maturity range based on each maturity range's percentage of the total value.

The Company's gross proceeds, realized gains and realized losses from its investments are as follows:

	Year Ended December 31,		
	2001	2000	1999
Gross proceeds	**$709,975**	$15,368	—
Realized gains	**$ 6,622**	$ 5,861	—
Realized losses	**$ (146)**	—	—

In 2001, the realized gains and losses relate to the Company's short-term investments and are included in interest income in the consolidated statement of operations. In 2000, the realized gain relates to the Company's sale of 290,000 ordinary shares of Cambridge Antibody Technology ("CAT") in November 2000 and is included in other income in the consolidated statement of operations. These ordinary shares were included in the Company's April 2000 purchase of 1,670,000 ordinary shares of CAT for the sterling equivalent of approximately $54,744, which gave the Company an equity stake of approximately six percent in CAT. In November 2000, the Company sold 290,000 ordinary shares for approximately $15,368, realizing a gain of approximately $5,861. As of December 31, 2001, the Company adjusted the investment of the remaining 1,380,000 ordinary shares to the current market value of $38,739 with an offsetting debit of $6,498 to accumulated other comprehensive income within the Company's stockholders' equity section of the balance sheet. Gross proceeds and realized gains and losses on all other sales of investments for 2000 and 1999 were immaterial. The cost of securities sold is based on the specific identification method.

(Note E)—Collaboration Agreements

Agreements with SmithKline Beecham Corporation (now GlaxoSmithKline Corporation)

In May 1993, the Company entered into a collaboration agreement as amended ("SB Collaboration Agreement"), providing SmithKline Beecham Corporation ("SB"), now GlaxoSmithKline Corporation ("GSK"), a first right to develop and market products in human and animal healthcare ("SB Products"), based upon human genes identified by the Company. In return, GSK has paid $126,000 to the Company since 1993. Approximately $55,000 was allocated to the purchase price of 5,406,952 shares of common stock with the balance of $71,000 recognized from license fees, option rights and milestone payments. In addition, the Company is entitled to (1) royalties on the net sales of SB Products, (2) product development progress payments and (3) the option to co-promote up to 20% of any product developed by SB under the collaboration agreement.

In June 1996, the SB Collaboration Agreements were substantially amended (the "SB Amendment") to allow the Company and SB together to enter into collaboration agreements with additional pharmaceutical companies ("Collaboration Partners") in certain pre-specified areas ("the SB Field"). The SB Amendment restricted the Company from entering into further collaborations in the SB Field during the initial research term, which expired in June 2001.

The SB Amendment provides that GSK and the Company share equally in any license fee payments paid by the Collaboration Partners and that the Company will receive all royalties and research payments paid by the Collaboration Partners.

In 2001, the Company received a $1,000 payment from GSK in connection with a development milestone met by GSK during the year.

Other Collaboration Agreements in the SB Field
In June 1995, the Company entered into an Option and License Agreement with Takeda Chemical Industries, Ltd. ("Takeda") pursuant to which Takeda was granted an exclusive option to license rights under the Company's patents and technology in the field of human healthcare (other than gene therapy, antisense and diagnostics) to make and sell a limited number (equal to the number of collaboration partners other than SB and Takeda with which the Company enters into collaboration agreements in the SB Field) of products in Japan. In consideration of the grant of the option, Takeda paid the Company $5,000, which was recognized as revenue by the Company in 1995, and agreed to pay to the Company royalties based on the sale of Takeda products covered by the Option and License Agreement and certain milestone payments.

In June 1996, the Company and SB entered into collaboration agreements ("Additional Collaboration Partner Agreements") with Schering Corporation and Schering-Plough Ltd. ("Schering-Plough"), Sanofi-Synthelabo S.A., and Merck KGaA ("Merck"), (collectively "Additional Collaboration Partners"). The Additional Collaboration Partner Agreements provide the Additional Collaboration Partners the rights and licenses to access the Company's human gene technology, as well as biological information developed by the Company and SB prior to, and in the case of the Company, after the effective date of such Agreement, to discover, develop and commercialize products based upon or derived from such Company technology in the SB Field (other than diagnostics and animal healthcare). The Additional Collaboration Partners are obligated to pay license fees, research payments, milestone payments and royalties in connection with the agreements. The initial research term expired in June 2001. The Company received aggregate license fees and research payments due under the Additional Collaboration Partner Agreements in the amount of $87,500, paid in equal installments over a five-year period, beginning in 1996. The Company has recognized revenue of $9,250, $17,500 and $17,500 in license fees and additional payments during 2001, 2000 and 1999, respectively, related to the Additional Collaboration Partner Agreements. In 2000, the Company implemented SAB 101. SAB 101 impacted the Company's revenues pertaining to these agreements for 2001 and 2000. See Note B, Summary of Significant Accounting Policies, for additional discussion.

Post-Initial Research Term
The initial research term under the collaboration agreements with GlaxoSmithKline and the other four collaboration partners expired on June 30, 2001. As of June 30, 2001, the Company's partners were pursuing approximately 430 research programs involving approximately 280 different genes for the creation of small molecule and antibody drugs. They also were developing approximately 30 therapeutic protein drugs. The Company cannot provide any assurance that any of these programs will be continued or result in any approved drugs.

Collaborative Agreements Outside of the SB Field
During 1996, the Company entered into several collaborative agreements with an initial aggregate research value of $33,000. These collaboration partners included Pioneer Hi-Bred International, Inc., Pharmacia & Upjohn Company, Schering-Plough Ltd. and F. Hoffman-La Roche, Ltd. The Company received no payments and did not recognize any revenues in 2001 pursuant to these agreements. For fiscal years 2000 and 1999, respectively, the Company received payments of $1,000 from these collaborators in each year and recognized revenue of $1,000 and $2,600 pursuant to these agreements. In addition, the Company received $1,000 in revenue in 2000 from MedImmune, Inc. pursuant to a 1995 license and royalty agreement.

In March 1998, the Company entered into a gene therapy collaboration agreement with Transgene, S.A. ("Transgene"), of Strasbourg, France. Under this agreement, the Company received a 10% equity interest in Transgene valued at $25,679 based on Transgene's initial public offering ("IPO") share price in exchange for giving Transgene the right to develop and co-market gene therapy products from 10 genes selected by Transgene from the Company's database. The Company initially recorded its investment in Transgene at the IPO price with an offsetting entry to deferred revenue. The Company is recognizing the $25,679 of revenue from this transaction over the shorter of the ten-year term of the agreement or prorated upon the selection of genes by Transgene. The Company recognized $2,568 as revenue in fiscal years 2001, 2000 and 1999.

In August 1999, the Company entered into a collaborative agreement with Cambridge Antibody Technology Ltd. ("CAT") of Melbourn, United Kingdom to jointly pursue the development of fully

human monoclonal antibody therapeutics. Under the agreement, CAT will conduct research to identify fully human, monoclonal antibodies specific for the Company's proprietary proteins. CAT will receive milestone payments from the Company in connection with the development of any such antibodies as well as royalty payments on the Company's net sales of such licensed product following regulatory approval. During 2000 and 1999, the Company paid CAT a total of $62 and $313, respectively, towards the achievement of the first contractual milestone. In addition, during 2000, the Company paid $375 based on the achievement of the first milestone pursuant to this agreement. The agreement provides for additional payments to CAT for each product relating to the achievement of milestones corresponding to the regulatory approval process. In the event of the achievement of other milestones or successful product launch, the Company would be obligated to pay CAT additional compensation and royalties. Subject to early termination under certain circumstances, this agreement will expire on the later of the expiration date of certain CAT patents or ten years after the date of first commercial sale of a product licensed by the Company.

In December 1999, the Company entered into a collaborative agreement, which was amended in 2001, with Abgenix, Inc. ("ABX"), of Fremont, California to exchange technology to identify novel human antibody drug candidates for development and commercialization. The Company has the right to use ABX's proprietary technology to generate fully human antibody drug candidates. In addition, ABX has a future option to develop and commercialize products derived from the Company's pool of novel human antibody drug candidates. Under this reciprocal agreement, depending upon which party's product moves through the regulatory approval process, the Company or ABX would be obligated to the other for milestone payments for each therapeutic product or each diagnostic product along with royalties in the event of a successful product launch. Subject to early termination under certain circumstances, this agreement will expire on the last of each party's royalty obligations.

In February 2000, the Company entered into a second agreement with Cambridge Antibody Technology. The ten-year agreement provides the Company with rights to use CAT technology to develop and sell an unlimited number of fully human antibodies for therapeutic and diagnostic purposes. The Company also has rights to use CAT antibody technology for the use and sale of research tools, for which the Company will pay CAT a share of revenues received. The Company will also pay CAT clinical development milestones and royalties based on product sales. The Company and CAT also plan to combine resources to develop and sell therapeutic antibody products. CAT has the right to select up to twenty-four of the Company's proprietary antigens for laboratory development. The Company has the option to share clinical development costs and to share the profits equally with CAT on up to eighteen such products. CAT has rights to develop six such products on its own. The Company is entitled to clinical development milestones and royalty payments on the products developed by CAT. In December 2001, the Company exercised an option to enter into an exclusive development partnership with CAT relating to a fully human monoclonal antibody and paid $1,000 to CAT in accordance with the terms of this agreement.

In March 2000, the Company paid $12,000 in licensing fees to CAT, which includes research support at CAT for ten years to help CAT develop the Company's human antibody products. The Company has capitalized this cost and is amortizing it on a straight-line basis of ten years. The unamortized amount of this research support was $9,800 and $11,000 as of December 31, 2001 and 2000, respectively.

In March 2000, the Company entered into a multi-year agreement with Dyax Corporation ("Dyax"), which was amended in July 2001. The agreement, as amended, provides the Company with rights to use Dyax's technology for ten years to develop an unlimited number of therapeutic and diagnostic products which the Company may elect to market itself or to out-license. The amended agreement also modifies the existing collaborative terms and now requires the Company to make minimum quarterly payments of $250 to Dyax in exchange for research services to be provided to the Company through the first quarter of 2003. The Company will also pay Dyax clinical development milestones and royalties based on product sales. In 2000, the Company paid $6,000 to Dyax for the technology license, which the Company has capitalized and is amortizing on a straight-line basis over five years, which is the term of the collaboration agreement. The unamortized amount of this license fee was $3,900 and $5,100 as of December 31,

2001 and 2000, respectively. The Company paid $2,623 and $2,075 in support payments during 2001 and 2000, respectively.

The Company's other ongoing technology collaborations as of December 31, 2001 are as follows:

Collaborator	Area	Year Initiated
Vical Incorporated	Gene therapy	2000
Praecis Pharmaceuticals	Metabolic disorders and infectious diseases	2000
Aventis-Behring, L.L.C.	Plasma proteins	2000
Dow Chemical	Chelator technology	2000
Medarex, Inc.	Human antibody therapeutics and diagnostics	2001
MDS Nordion	Clinical manufacture of radioiodinated drug	2001

During 2001, the Company paid an aggregate of $942 in research services to certain of the above collaborators. No payments for research services were paid to these collaborators in 2000 or 1999. While future license or royalty payments may occur in the future in connection with these collaborations, no license or royalty payments were made or received during 2001, 2000 or 1999.

(Note F)—Property, Plant and Equipment

Property, plant and equipment are stated at cost and are summarized as follows:

	December 31, 2001	2000
Laboratory equipment	**$ 38,593**	$31,075
Computers and EDP equipment	**14,293**	10,502
Furniture, transportation and office equipment	**3,224**	921
Leasehold improvements	**27,413**	20,958
Construction in progress	**56,671**	7,294
	140,194	70,750
Less: accumulated depreciation and amortization	**38,912**	32,183
	$101,282	$38,567

The Company entered into a capital lease for computer equipment in 2001. The capital lease is included in the Computer and EDP equipment amount above, at a cost of $763 and accumulated amortization of $21 as of December 31, 2001. Amortization expense for this equipment is included in depreciation and amortization within the consolidated statements of cash flows.

(Note G)—Other Assets

Other assets are comprised of the following:

	December 31, 2001	2000
Deferred financing costs, net of accumulated amortization of $4,175 and $2,081, as of December 31, 2001 and 2000, respectively	**$11,404**	$14,437
Prepaid research services	**10,300**	11,000
License fee	**3,900**	5,100
Note receivable from Officer	**891**	891
Assembled Workforce, Principia, net of accumulated amortization of $42 as of December 31, 2000	**—**	458
All other assets	**104**	805
	$26,599	$32,691

Deferred financing costs were incurred in connection with the Company's four convertible subordinated debt offerings during fiscal 2000 and 1999. During the first quarter of 2000, the Company completed the private placement of $225,000 of 5% Convertible Subordinated Notes due 2007 and $300,000 of 3¾% Convertible Subordinated Notes due 2007. Debt issuance costs for the total $525,000 of Notes amounted to approximately $16,305, representing primarily underwriting fees of approximately 3% of the gross amount of notes, and are being amortized on a straight-line basis which approximates an effective interest method over the life of the Notes.

During 1999, in connection with the private placement of $125,000 of 5½% Convertible Subordinated Notes due 2006 and $200,000 of 5% Convertible Subordinated Notes due 2006, the Company incurred financing costs of approximately $10,174, representing primarily underwriting fees of 3% of the gross amount of notes issued. These costs were being amortized on a straight-line basis over the life of the Notes. However, in January 2000, the Company completed a tender offer to substantially all of the holders of the 5½% Convertible Subordinated Notes due 2006, which resulted in a reclassification of $3,470 of unamortized deferred financing costs associated with these Notes to stockholders' equity. In March 2000, the Company announced and completed the call of its $200,000 5% Convertible Subordinated Notes due 2006. As a result, the Company reclassified $6,000 of remaining unamortized debt financing costs to stockholders' equity as part of the conversion.

During 2001, the Company converted an aggregate of $28,595 of convertible subordinated notes to common stock. In addition, the Company reclassified $751 of unamortized debt financing costs associated with these notes to stockholders' equity as part of the conversion. See Note I, Long-Term Debt, for additional discussion.

See Note E, Collaboration Agreements, for discussion of prepaid research services and license fees relating to Cambridge Antibody Technology and Dyax Corporation, respectively. Prepaid research services also includes $500 paid to MDS Nordion that will be amortized over an eighteen-month period beginning in 2002 in connection with future services to be provided to the Company.

The Company holds a note receivable from an officer of $891 that is due on demand and does not bear interest. The note is collateralized by shares of the Company's common stock owned by the officer that have a market value of at least 200% of the outstanding balance of the note.

See Note C, Acquisition of Principia Pharmaceutical Corporation, for discussion of Principia Assembled Workforce and the write-off of this asset in 2001.

(Note H)—Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses are comprised of the following:

	December 31,	
	2001	2000
Accrued interest	**$ 7,531**	$ 8,151
Fixed asset purchases	**11,747**	2,733
Professional fees	**7,546**	4,142
Other accrued expenses	**6,091**	3,291
	$32,915	$18,317

(Note I)—Long-Term Debt

The components of long-term debt are as follows:

	December 31,		December 31,	
Debt	2001 Interest Rates	Maturities	2001	2000
MIDFA	1.84%	December 2003	**$ 892**	$ 1,336
5.5% Convertible Subordinated Notes	5.50%	June 2006	**3,120**	6,715
5.0% Convertible Subordinated Notes	5.00%	February 2007	**199,900**	224,900
3.75% Convertible Subordinated Notes	3.75%	March 2007	**300,000**	300,000
GE Capital Corporation	12.60%	Repaid June 2001	**—**	924
			503,912	533,875
Less current portion			**444**	729
			$503,468	$533,146

Annual maturities of all long term debt are as follows:

2002	$ 444
2003	448
2004	—
2005	—
2006	3,120
2007 and thereafter	499,900
	$503,912

In December 1994, the Company entered into a loan agreement with Maryland Industrial Development Financing Authority ("MIDFA"). Major leasehold improvements were financed with the proceeds of a $4,000 taxable variable rate bond issue (the "Bonds") from MIDFA. The Company is required to make annual payments of $444 commencing December 1995 plus interest at a variable rate of interest (1.84% at December 31, 2001 and 6.57% at December 31, 2000), to the trustee on behalf of the bondholders which is equal to the interest and principal requirements on the bonds. The variable rate is equal to 50 basis points plus the higher of the yield equivalent of the average 30-day or 90-day commercial paper rate. Under certain circumstances, the rate may be adjusted either upward or downward but in no event in excess of 10 basis points above or below the rate determined above. MIDFA has entered into an indenture with the Trustee whereby the Trustee has obtained an irrevocable letter of credit on behalf of the bondholders.

Required monthly principal payments of $37 plus interest are deposited into a bond fund. The interest is disbursed monthly to the bondholders. Principal is repaid to the bondholders at the rate of $444 annually with a final payment of $448 on December 1, 2003. The Company deposited $502, $559 and $561 of principal and interest into the bond fund during the years ended December 31, 2001, 2000 and 1999, respectively.

In connection with the loan agreement, the Company entered into an irrevocable Letter of Credit Agreement with a bank for the account of the Company and in favor of the trustee in the initial amount of $4,067, which expires on December 15, 2003. Concurrently, the Company entered into a Collateral Pledge Agreement with the bank. The Company is required to maintain 43% of the outstanding principal amount of the Bonds (50% is required under certain circumstances) with the bank as Collateral for the Letter of Credit. Pursuant to the Collateral Pledge Agreement at December 31, 2001 and 2000, the Company had $1,164 and $1,123, respectively, on deposit with the bank, which is included in Restricted Investments in the consolidated balance sheets. The pledge collateral will be released upon the payment and performance in full of the Company's Letter of Credit obligations. The agreement contains covenants with respect to tangible net worth, cash and cash equivalents and investment securities, as well as other covenants, and prohibits the payment of cash dividends.

During the second quarter of 1999, the Company completed the private placement of $125,000 of 5½% Convertible Subordinated Notes due June 2006 convertible into common stock at $13.05 per share. In January 2000, the Company concluded an offer to the holders of its $125,000 aggregate principal amount of 5½% Notes to convert their notes into common stock. As an inducement to convert, the Company offered its 5½% Note holders an additional one hundred and eighty dollars per thousand dollars of principal amount of the 5½% Notes, payable in the Company's common stock. This inducement was in addition to the 76.6284 shares issuable for each thousand dollars of principal amount of 5½% Notes convertible at $13.05 per share. As a result of the conversions, the Company converted $118,285 of 5½% Notes to common stock and issued a total of 9,572,208 shares of common stock, including a total of 508,244 shares of common stock issued as an inducement to convert. In the first quarter of fiscal 2000, the Company recorded a one-time charge of $20,818, including $19,433 in inducement costs associated with this conversion. In addition, the Company reclassified $3,470 of unamortized debt financing costs to stockholders' equity as part of the conversion. During 2001, holders of $3,595 of these 5½% Notes voluntarily converted their Notes into 275,477 shares of common stock. In addition, the Company reclassified $78 of unamortized debt financing costs to stockholders' equity as part of the conversions. Total remaining debt issuance costs were approximately $111 and $213, of which $40 and $46 had been amortized as of December 31, 2001 and 2000, respectively.

During the fourth quarter of 1999, the Company completed the private placement $200,000 of 5% Convertible Subordinated Notes due December 2006, convertible into common stock at $35.8125 per share. In March 2000, the Company announced and completed the call of its $200,000 aggregate principal amount of 5% Convertible Subordinated Notes due 2006. All of the holders of the notes converted their notes into common stock at a price of $35.8125 per share, which is equivalent to 27.9232 shares of common stock per one thousand dollars of principal amount of notes. As a result of the conversion, the Company issued 5,584,584 shares of common stock to the holders of these Notes. In addition, the Company made a "make-whole" payment of one hundred and fifty dollars per one thousand dollars of principal amount of notes, which resulted in a one-time charge to earnings of $30,000. In addition, the Company reclassified $6,000 of unamortized debt financing costs to stockholders' equity as part of the conversion.

During the first quarter of 2000, the Company completed the private placement of $225,000 of 5% Convertible Subordinated Notes due 2007 ("5% Notes") and $300,000 of 3¾% Convertible Subordinated Notes due 2007 ("3¾% Notes"). The 5% Notes and the 3¾% Notes are convertible into common stock at $56.25 and $109.50 per share, respectively. Debt issuance costs for the total $525,000 of Notes amounted to approximately $16,305, including accrued expenses, of which $2,035 had been amortized as of December 31, 2000. During 2000, holders of $100 of these 5% Notes voluntarily converted their Notes into 1,776 shares of common stock. During 2001, holders of

$25,000 of these 5% Notes voluntarily converted their Notes into 506,690 shares of common stock. In addition, the Company reclassified $673 of unamortized debt financing costs to stockholders' equity as part of the conversions. Total remaining debt issuance costs were approximately $15,468 and $16,299, of which $4,135 and $2,035 had been amortized as of December 31, 2001 and 2000, respectively.

In connection with the Company's acquisition of Principia Pharmaceutical Corporation ("Principia") in the third quarter of 2000, the Company acquired equipment debt to GE Capital Corporation. As of the date of Principia's acquisition, the unpaid debt was approximately $1,000. Because this debt carried an interest rate of 12.6%, the Company repaid the remaining amount of this debt during 2001.

(Note J)—Commitments and Other Matters

Leases

The Company leases office and laboratory premises and equipment pursuant to operating leases expiring at various dates through 2021. The leases contain various renewal options. Minimum annual rentals are as follows:

Year Ending December 31,	Operating Leases	Capital Lease
2002	$ 16,057	$241
2003	15,730	255
2004	21,635	247
2005	21,297	—
2006	20,395	—
2007 and thereafter	96,533	—
	$191,647	743
Current portion under capital lease		241
Long-term obligation under capital lease		$502

During 1997 and 1999, the Company entered into two long-term leases expiring January 1, 2019 for a process development and manufacturing facility aggregating 127,000 square feet and built to the Company's specifications. Annual base rent under the leases is $3,765. Pursuant to the terms of these leases, the Company had security deposits of $12,787 and $12,332 as of December 31, 2001 and 2000, respectively, on deposit with the financing bank which is included in Restricted Investments in the consolidated balance sheets. The security deposit will accrue interest up to a total security deposit of $15,000. Any amounts over $15,000 will be released to the Company. The security deposits will be released at the end of the lease term. The lease agreements contain covenants with respect to tangible net worth, cash and cash equivalents and investment securities, as well as other covenants. The leases require additional security deposit if the Company does not meet its covenants. The Company has an option, but not an obligation, to purchase these facilities during the lease term at various prices or at the end of the lease term for an aggregate price of approximately $19,400.

During 2001, the Company entered into two seven-year lease agreements (the "October 2001 lease" and the "November 2001 lease") relating to research, manufacturing, and administrative space the Company either acquired or has under construction by two trusts established solely for that purpose. The total financed cost of the facilities anticipated to be covered under the October 2001 lease and the November 2001 lease is approximately $76,000 and $450,000, respectively. Rent obligations for the October 2001 lease began in 2001, while rent obligations for the November 2001 lease do not begin until the end of the construction period, which is currently anticipated as 2004. The Company's rent obligations will approximate the lessor's debt service costs. With respect to the Company's rent for October 2001 lease, as of December 31, 2001, the trust had fixed the interest rate on $56,000 at approximately 4.5%. The remaining $20,000 is floating based primarily on the seven-day LIBOR rate, which was approximately 1.98%, as of December 31, 2001.

The Company's operating lease commitments include minimum annual rentals for these leases and have been computed using either the locked-in interest rate or the applicable floating interest rate as of December 31, 2001. Over the life of these leases, an aggregate rent obligation of approximately $65,816 has been included in the Company's total operating lease commitment.

With respect to the November 2001 lease, the Company has retained ownership of the land for the main campus component of this project. The Company has entered into a ground lease with the trust for the land at fair market value rates. Thereafter, rent will be reduced to a nominal amount. The Company will record these lease payments on its balance sheet as deferred rental income over the two-year construction period and then amortize this deferral over the remaining term (approximately five years).

Under these lease agreements, which the Company has accounted for as operating leases, the Company has the option to purchase the properties, during or at the end of the lease terms, at an aggregate amount of approximately $526,000. Alternatively, the Company can cause the properties to be sold to third parties. The Company is contingently liable for the residual value guarantee associated with each property up to an aggregate amount of $459,430, assuming the full amount of the leases is used for construction activities.

With respect to the October 2001 lease, the Company has a residual value guarantee of 85% of the total financed cost at lease termination. In the event of the Company's default, the Company is responsible for 100% of the total financed cost of the project. Although the trust is responsible for servicing and repaying the debt and equity financings to various parties, the Company has made the residual value guarantee to the trust. In the event the trust defaults to the lender or in the event the trust is terminated, the Company has the right to cure the default or exercise its option to acquire the property. At any time during the lease term, the Company has the option to purchase legal and/or beneficial interest in the project for 100% of the lease balance plus any unpaid indemnity amounts.

With respect to the November 2001 lease, the Company has a residual value guarantee of 87.74% of the total financed cost at lease termination. In the event of default, the Company is responsible for 100% of the total financed cost of the project. During the construction period, the Company has a residual value guarantee of 89.9% of the financed cost incurred. Although the trust is responsible for servicing and repaying the debt and equity financings to various parties, the Company has made the residual value guarantee to the trust. In the event the trust defaults to the lender or in the event the trust is terminated, the Company has the right to cure the default or exercise its option to acquire the property. At any time during the lease term, the Company has the option to purchase legal and/or beneficial interest in the project for 100% of the lease balance plus any unpaid indemnity amounts.

In connection with the October 2001 lease, the Company must maintain minimum levels of unrestricted cash, cash equivalents and marketable securities. In connection with the November 2001 lease, the Company must maintain minimum levels of unrestricted cash, cash equivalents and marketable securities and certain debt ratios.

The Company has entered into leases for office and laboratory space which provide for certain rent abatement and rent escalations on each anniversary of the lease commencement date. For financial reporting purposes, rent expense is charged to operations on a straight-line basis over the term of the lease, resulting in a liability for deferred rent of $2,439 and $2,705 at December 31, 2001 and 2000, respectively.

Certain other leases provide for escalation for increases in real estate taxes and certain operating expenses, as well as various renewal terms.

Rent expense aggregated $14,713, $8,352 and $7,210 for the years ended December 31, 2001, 2000 and 1999, respectively.

Capital Expenditures

At December 31, 2001 and 2000, the Company had commitments for capital expenditures, consisting primarily of laboratory space and equipment, of approximately $16,300 and $3,637, respectively.

401(k) Plan

The Company has adopted a 401(k) pension plan available to eligible full-time employees. The Company made contributions of $857, $600 and $446 to the plan for the years ended December 31, 2001, 2000 and 1999, respectively.

(Note K)—Stockholders' Equity

Common Stock and Preferred Stock

On May 23, 2001, the Company's stockholders approved an amendment to the Company's Restated Certificate of Incorporation (Fifth) which increased the Company's authorized common stock to 400,000,000 from 250,000,000 shares. In addition, the Company's stockholders approved an amendment to the 2000 Stock Incentive Plan which established a limit on the number of shares of common stock that may be issued with respect to awards granted each year. For 2001, 2002 and 2003, this limit will be equal to five percent of the outstanding common stock as of the end of the preceding fiscal year. Shares that are available for a given year but not subject to awards granted in that year will be carried forward ("Carryover Shares") to the following year. After 2003, only the carried forward shares and the shares that are returned to the pool of available shares due to award forfeitures, will be available for issuance. Following stockholder approval on May 23, 2001, five percent of the outstanding common stock as of December 31, 2000, or 6,259,627 shares, were reserved for issuance under the 2000 Plan.

On January 5, 2000, the Company's Board of Directors approved a two-for-one stock split to be effected in the form of a stock dividend payable to stockholders of record as of January 14, 2000. On January 28, 2000, the Company effected the two-for-one stock split.

On September 12, 2000, the Company's Board of Directors approved a two-for-one stock split to be effected in the form of a stock dividend payable to stockholders of record as of September 28, 2000. On October 5, 2000, the Company effected the two-for-one stock split.

On November 1, 2000, the Company completed a public offering of its common stock by issuing 12,650,000 shares at an aggregate value of $948,750, or $75.00 per share. Stock issuance costs for the offering amounted to approximately $36,092. The Company received net proceeds of $912,658.

All share, per share and common stock amounts presented in the financial statements and related footnotes for all periods presented have been restated to reflect the two two-for-one stock splits effected during 2000.

Stock Option Plans

The Company has stock option plans under which options to purchase shares of the Company's common stock may be granted to employees, consultants and directors at a price no less that the fair market value on the date of grant. At December 31, 2001, the total authorized number of shares under all plans was 40,372,299. The vesting period of the options is determined by the Board of Directors and is generally four years. All options expire after ten years from the date of grant.

The Company issued 10,000, 2,600 and 48,000 options to non-employees during the years ended December 31, 2001, 2000 and 1999, respectively. The fair value of these options is being amortized to expense over the service period.

Option transactions during 2001, 2000 and 1999 are summarized as follows:

	Year Ended December 31,					
	2001		2000		1999	
	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price	Shares	Weighted-Average Exercise Price
Outstanding at beginning of year	**21,503,182**	**$31.49**	17,234,972	$14.10	14,325,352	$ 8.46
Options granted	**6,751,719**	**44.06**	7,070,139	65.99	5,568,472	24.94
Options exercised	**(2,284,752)**	**9.50**	(2,480,240)	9.49	(2,291,604)	6.15
Options canceled or expired	**(1,269,382)**	**56.81**	(321,689)	27.42	(367,248)	7.95
Outstanding at end of year	**24,700,767**	**35.63**	21,503,182	31.49	17,234,972	14.10
Options exercisable at end of year	**9,223,400**	**24.67**	6,583,926	12.96	5,379,516	10.32

The following table summarizes information about stock options outstanding at December 31, 2001:

	Options Outstanding			Options Exercisable	
Range of Exercise Price	Number Outstanding	Weighted-Average Remaining Contractual Life (in Years)	Weighted-Average Exercise Price	Number Exercisable	Weighted-Average Exercise Price
$ 0.05 to $ 5.50	195,155	2.6	$ 3.81	195,155	$ 3.81
$ 5.51 to $ 8.63	5,759,910	6.1	7.40	3,949,614	7.33
$ 8.64 to $ 17.50	709,135	7.1	10.20	330,768	10.09
$17.51 to $ 32.74	5,563,028	6.8	26.32	2,901,952	25.71
$32.75 to $ 41.25	4,336,072	9.7	38.46	134,679	37.50
$41.26 to $ 64.48	2,189,567	9.3	49.70	195,891	49.70
$64.49 to $ 75.00	4,941,521	8.9	66.19	1,152,576	66.15
$75.01 to $110.00	1,006,379	8.0	79.80	362,765	79.49
	24,700,767	7.8	35.63	9,223,400	24.67

Employee Stock Purchase Plan

During 2000, the Company's stockholders approved the establishment of an Employee Stock Purchase Plan that qualifies under Section 423 of the Internal Revenue Code and permits substantially all employees to purchase shares of common stock. Participating employees may purchase common stock through payroll deductions at the end of each participation period at a purchase price equal to 85% of the lower of the fair market value of the common stock at the beginning or the end of the participation period. Common stock reserved for future employee purchases under the plan aggregated 481,056 and 500,000 shares as of December 31, 2001 and 2000, respectively. Common stock issued under this plan totaled 18,944 in 2001. Under the plan, eligible employees may purchase shares of common stock on certain dates and at certain prices as set forth in the plan.

The Company applies APB No. 25 in accounting for its stock option plans and, accordingly, recognizes compensation expense for the difference between the fair value of the underlying common stock and the grant price of the option at the date of grant. Had compensation cost for the Company's stock option plans been determined based upon the fair value at the grant date for awards under the plans consistent with the methodology prescribed under SFAS No. 123, the Company's net loss in 2001, 2000 and 1999 would have been approximately $242,615, $300,569 and $78,202, respectively, or $1.91, $2.71 and $0.85 per share, respectively. The weighted-average fair value of the stock options granted during 2001, 2000 and 1999 is estimated as $31.26, $57.08 and $15.65 per share, respectively. The weighted-average fair value of the employee stock purchase plan rights granted during 2001 is estimated as $23.71 per share.

These weighted average fair values were determined based on the Black-Scholes option-pricing model with the following assumptions:

	Year Ended December 31,		
	2001	2000	1999
Expected life:			
Stock options	**6.0 years**	6.0 years	6.0 years
Employee stock purchase plan	**1.0 year**	—	—
Interest rate	**4.49%**	5.21%	6.71%
Volatility	**79%**	111%	62%
Dividend yield	**0%**	0%	0%

The effect of applying SFAS No. 123 on 2001, 2000 and 1999 pro forma net loss and net loss per share as stated above is not necessarily representative of the effects on reported net loss for future years due to, among other things, (1) the vesting period of the stock options and the (2) fair value of additional stock options in future years.

Options available for future grant were 4,691,650 at December 31, 2001.

(Note L)—Preferred Share Purchase Rights

On May 20, 1998, the Company adopted a Shareholder Rights Plan which provided for the issuance of rights to purchase shares of Junior Participating Preferred Stock, par value $0.01 per share (the "Preferred Shares"), of the Company. Under the Shareholder Rights Plan, the Company distributed one preferred share purchase right (a "Right") for each outstanding share of common stock, par value $0.01 (the "Common Shares"), of the Company. The Rights were distributed on June 26, 1998 to stockholders of record on May 27, 1998.

Each Right entitles the holder to purchase from the Company one four-thousandth of a Preferred Share at a price of $250 per one four-thousandth of a Preferred Share, subject to adjustment. The rights become exercisable ten business days after any party acquires or announces an offer to acquire beneficial ownership of 15% or more of the Company's Common Shares. In the event that any party acquires 15% or more of the Company's Common Shares, the Company enters into a merger or other business combination, or if a substantial amount of the Company's assets are sold after the time that the Rights become exercisable, the Rights provide that the holder will receive, upon exercise, shares of the common stock of the surviving or acquiring company, as applicable, having a market value of twice the exercise price of the Right.

The Rights expire May 20, 2008, and are redeemable by the Company at a price of $0.00025 per Right at any time prior to the time that any party acquires 15% or more of the Company's Common Shares. Until the earlier of the time that the Rights become exercisable, are redeemed or expire, the Company will issue one Right with each new Common Share issued.

(Note M)—Income Taxes

The Company provides for income taxes using the liability method. The difference between the tax provision and the amount that would be computed by applying the statutory Federal income tax rate to income before taxes is attributable to the following:

	Year Ended December 31,		
	2001	2000	1999
Federal income tax provision at 34%	**$(39,832)**	$(82,818)	$(14,261)
Debt conversion expenses for which no tax benefit is available	**1,504**	19,626	—
Stock option deduction for which no book benefit is available	**(32,794)**	(47,539)	(2,900)
Purchased in-process R&D for which no tax benefit is available	**—**	51,770	—
Net operating loss adjustment	**—**	(6,347)	2,969
State taxes, net of federal tax benefit	**(5,412)**	(12,211)	(2,001)
Foreign taxes	**—**	149	1,344
Tax credits, principally for research and development	**(6,552)**	(8,900)	(3,274)
Other	**100**	(1,141)	96
Increase in valuation allowance on deferred tax asset	**82,986**	87,636	18,252
	$ —	$ 225	$ 225

Temporary differences and carryforwards which give rise to a significant portion of deferred tax assets and liabilities are as follows:

	Current Asset/(Liability)	Long-Term Asset/(Liability)
December 31, 2001		
Net operating loss carryforward	**$ —**	**$ 184,445**
Research and development and other tax credit carryforwards	**—**	**24,968**
Deferred revenue	**991**	**3,967**
Depreciation	**—**	**1,523**
Reserves and accruals	**1,585**	**3,408**
Loss on impaired investment	**—**	**8,618**
Other	**196**	**1,132**
	2,772	**228,061**
Less valuation allowance	**(2,772)**	**(228,061)**
	$ —	**$ —**

	Current Asset/(Liability)	Long-Term Asset/(Liability)
December 31, 2000		
Net operating loss carryforward	$ —	$ 112,143
Research and development and other tax credit carryforwards	—	18,417
Deferred revenue	4,901	5,950
Depreciation	—	2,564
Reserves	—	860
Other	960	2,061
	5,861	141,995
Less valuation allowance	(5,861)	(141,995)
	$ —	$ —

The Company recognized a valuation allowance to the full extent of its deferred tax assets since the likelihood of realization of the benefit cannot be determined. Not included in the above schedule of deferred tax assets and liabilities is a deferred tax liability associated with unrealized gains on investments of $12,385 and $10,887 at December 31, 2001 and 2000, respectively. This liability is currently shown as a component in the consolidated statements of stockholders' equity.

Provision for income taxes is comprised of the following:

	Year Ended December 31,		
	2001	2000	1999
Current:			
Federal	**$ —**	$ —	$ —
State	**—**	—	—
Foreign taxes	**—**	225	225
Deferred	**—**	—	—
	$ —	$225	$225

The Company has available tax credit carryforwards of approximately $25,000, which expire, if unused, from the year 2008 through the year 2021. The Company has net operating loss carryforwards for federal income tax purposes of approximately $477,600 which expire, if unused, from the year 2010 through the year 2021. The Company's ability to utilize these NOLs may be limited under Internal Revenue Code Section 382. The tax benefit of approximately $232,500 of net operating losses related to stock options will be credited to equity when the benefit is realized through utilization of the net operating loss carryforwards.

(Note N)—Investment in Vascular Genetics, Inc.

In November 1997, the Company entered into an agreement with three other parties to form Vascular Genetics, Inc. ("VGI"), to pursue the development and commercialization of gene therapy products for the treatment of vascular diseases. As a result of the November 1997 agreement and other transactions since that time, as of December 31, 2001, the Company holds a significant minority equity interest in VGI of 27%. The Company also holds certain preemptive rights that will permit retention of the Company's ownership position under some circumstances in the event of a future financing by VGI. In addition, the Company has the option to purchase 100% of VGI's common stock at fair market value upon receiving the approval of two-thirds of the shareholders. The Company will earn royalties on net sales from products developed and commercialized by VGI or by a party granted a sublicense by VGI. Royalty rates are competitive and increase as specified sales targets are reached. In 1998, the Company loaned $600 to VGI of which the Company forgave $100 in 1998. The Company has appointed two directors to the Board of Directors of VGI.

During 1999, the Company provided manufacturing services and product to VGI in connection with a manufacturing agreement. At December 31, 2000, the Company's receivable balance due from VGI was $1,532. Based upon VGI's uncertain financial condition, the Company decided to fully reserve the receivable balance from VGI as of December 31, 2000. During 2001, the Company provided no manufacturing or research services to VGI nor did the Company receive any payments from VGI. The Company has no carrying value for its investment in VGI at December 31, 2001.

(Note O)—Net Loss Per Share

The following table sets forth the computation of basic and diluted net loss per share:

	Year Ended December 31,		
	2001	2000	1999
Numerator:			
Net loss before cumulative effect of change in accounting principle	**$(117,152)**	$(235,556)	$(42,169)
Cumulative effect of change in accounting principle	—	(8,250)	—
Net loss	**$(117,152)**	$(243,806)	$(42,169)
Denominator:			
Denominator for basic and diluted earnings per share—weighted-average shares	**126,990,788**	110,929,292	92,051,988
Net loss per share, basic and diluted:			
Net loss per share before cumulative effect of change in accounting principle	**$ (0.92)**	$ (2.12)	$ (0.46)
Cumulative effect of change in accounting principle	—	(0.08)	—
Net loss per share	**$ (0.92)**	$ (2.20)	$ (0.46)

(Note P)—Quarterly Financial Information (unaudited)

Quarterly financial information for fiscal 2001 and 2000 is presented in the following tables:

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2001				
Revenue	**$ 5,267**	**$ 5,267**	**$ 1,642**	**$ 642**
Income (loss) from operations	**(35,112)**	**(40,896)**	**(44,977)**	**(51,187)**
Net income (loss) [1]	**(13,007)**	**(24,024)**	**(24,879)**	**(55,242)**
Net income (loss) per share, basic and diluted	**(0.10)**	**(0.19)**	**(0.19)**	**(0.43)**
2000				
Revenue	$ 5,267	$ 5,267	$ 6,267	$ 5,267
Income (loss) from operations	(20,263)	(22,960)	(157,528)	(29,770)
Net income (loss) before cumulative effect of change in accounting principle [2]	(64,273)	(16,368)	(148,909)	(6,006)
Cumulative effect of change in accounting principle	(8,250)	—	—	—
Net income (loss) [2]	$(72,523)	$(16,368)	$(148,909)	$ (6,006)
Basic and diluted net income per share before cumulative effect of change in accounting principle [2]	$ (0.62)	$ (0.15)	$ (1.35)	$ (0.05)
Cumulative effect of change in the accounting principle	(0.08)	—	—	—
Net income (loss) per share, basic and diluted [2]	$ (0.70)	$ (0.15)	$ (1.35)	$ (0.05)

(1) The Company's results for the fourth quarter of 2001 include a non-recurring charge of $22,314, or $0.17 per share, relating to an impairment charge recognized in connection with the Company's investment in Transgene, S.A.

(2) The Company's results for the first and third quarters of 2000 include non-recurring charges relating to debt conversion expenses of $50,818, or $0.49 per share, and Purchased In-Process Research and Development of $134,050, or $1.21 per share, respectively.

REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

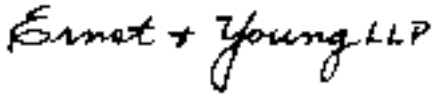
Board of Directors and Stockholders
Human Genome Sciences, Inc.
Rockville, Maryland

We have audited the accompanying consolidated balance sheets of Human Genome Sciences, Inc. as of December 31, 2001 and 2000, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2001. 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. 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, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Human Genome Sciences, Inc. at December 31, 2001 and 2000, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States.

As discussed in Note B of Notes to Consolidated Financial Statements, in 2000 the Company changed its method of accounting for revenue recognition in accordance with guidance provided in Securities and Exchange Commission Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements."



McLean, Virginia
February 12, 2002

Corporate Headquarters

Human Genome Sciences, Inc.
9410 Key West Avenue
Rockville, MD 20850-3338
Phone: (301) 309-8504
Fax: (301) 309-8512
http://www.hgsi.com

Transfer Agent

American Stock Transfer & Trust Company
59 Maiden Lane
New York, NY 10038
Phone: (800) 937-5449

Form 10-K

A copy of the Form 10-K filed with the Securities and Exchange Commission can be obtained free of charge by writing the Company at:

9410 Key West Avenue
Rockville, MD 20850-3338
Attention: Investor Relations

Annual Meeting

May 22, 2002 at 9:30 am
University System of Maryland—Shady Grove Center
Germantown Room
9630 Gudelsky Drive
Rockville, MD 20850

Common Stock Market Prices

Our common stock is traded on the NASDAQ National Market System under the symbol HGSI. Our common stock began trading on December 2, 1993. The following table presents the quarterly high and low closing prices as quoted by NASDAQ, restated to reflect two two-for-one stock splits effective January 28, 2000 and October 5, 2000.

2001	High	Low
First Quarter	**$67.81**	**$40.38**
Second Quarter	**75.31**	**39.19**
Third Quarter	**58.80**	**28.00**
Fourth Quarter	**47.28**	**30.88**

2000	High	Low
First Quarter	$112.63	$34.56
Second Quarter	75.93	27.63
Third Quarter	89.91	60.41
Fourth Quarter	100.94	58.50

As of March 28, 2002, there were approximately 775 holders of record of our common stock. We have never declared or paid any cash dividends. We do not anticipate declaring or paying cash dividends for the foreseeable future, in part because existing contractual agreements prohibit such dividends. Instead we will retain our earnings, if any, for the future operation and expansion of our business.

Health professionals or patients interested in inquiring about trials involving Human Genome Sciences' products are encouraged to inquire via the Contact Us section of the Human Genome Sciences web site, www.hgsi.com, or by calling us at (301) 610-5790, extension 3550.

Board of Directors

William A. Haseltine, Ph.D.
Chairman & Chief Executive Officer,
Human Genome Sciences, Inc.

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Senior Fellow, Center for Naval Analyses
Former Secretary of the Navy

Jürgen Drews, M.D.
Member of the Executive Committee
of the Roche Group (Retired)
Chairman, International Biomedicine Management Partners
Managing Partner, Bear Stearns Health Innoventures, LLC

Richard C. Holbrooke
Vice Chairman, Perseus, L.L.C.
Former U.S. Ambassador to the United Nations

Robert D. Hormats
Vice Chairman, Goldman Sachs (International)

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Chief Executive Officer of Sandoz Pharma Ltd. (Retired)

Craig A. Rosen, Ph.D.
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Human Genome Sciences, Inc.

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Managing General Partner, Polaris Venture Partners

Laura D'Andrea Tyson, Ph.D.
Dean, London Business School

James B. Wyngaarden, M.D.
Emeritus Professor, Duke University, School of Medicine
Former Director, National Institutes of Health
Former Director, Human Genome Organization

Officers

William A. Haseltine, Ph.D.
Chairman & Chief Executive Officer

Craig A. Rosen, Ph.D.
Executive Vice President, Research & Development

Ellen S. Baron, Ph.D.
Senior Vice President, Business Development

Susan Bateson McKay
Senior Vice President, Human Resources

James H. Davis, Ph.D., J.D.
Senior Vice President, General Counsel & Secretary

Steven C. Mayer
Senior Vice President & Chief Financial Officer

David C. Stump, M.D.
Senior Vice President, Drug Development

Reiner L. Gentz, Ph.D.
Senior Vice President, Protein Development

Sally D. Bolmer, Ph.D.
Vice President, Regulatory Affairs

Alain D. Cappeluti
Vice President, Finance

Michael R. Fannon
Vice President & Chief Information Officer

Fazal R. Khan, Ph.D.
Vice President, Manufacturing Operations

Arthur C. Louie, M.D.
Vice President, Medical Affairs

Jerry Parrott
Vice President, Corporate Communications & Public Policy

Jeanne M. Riley
Vice President, Strategic Marketing

Steven M. Ruben, Ph.D.
Vice President, Research

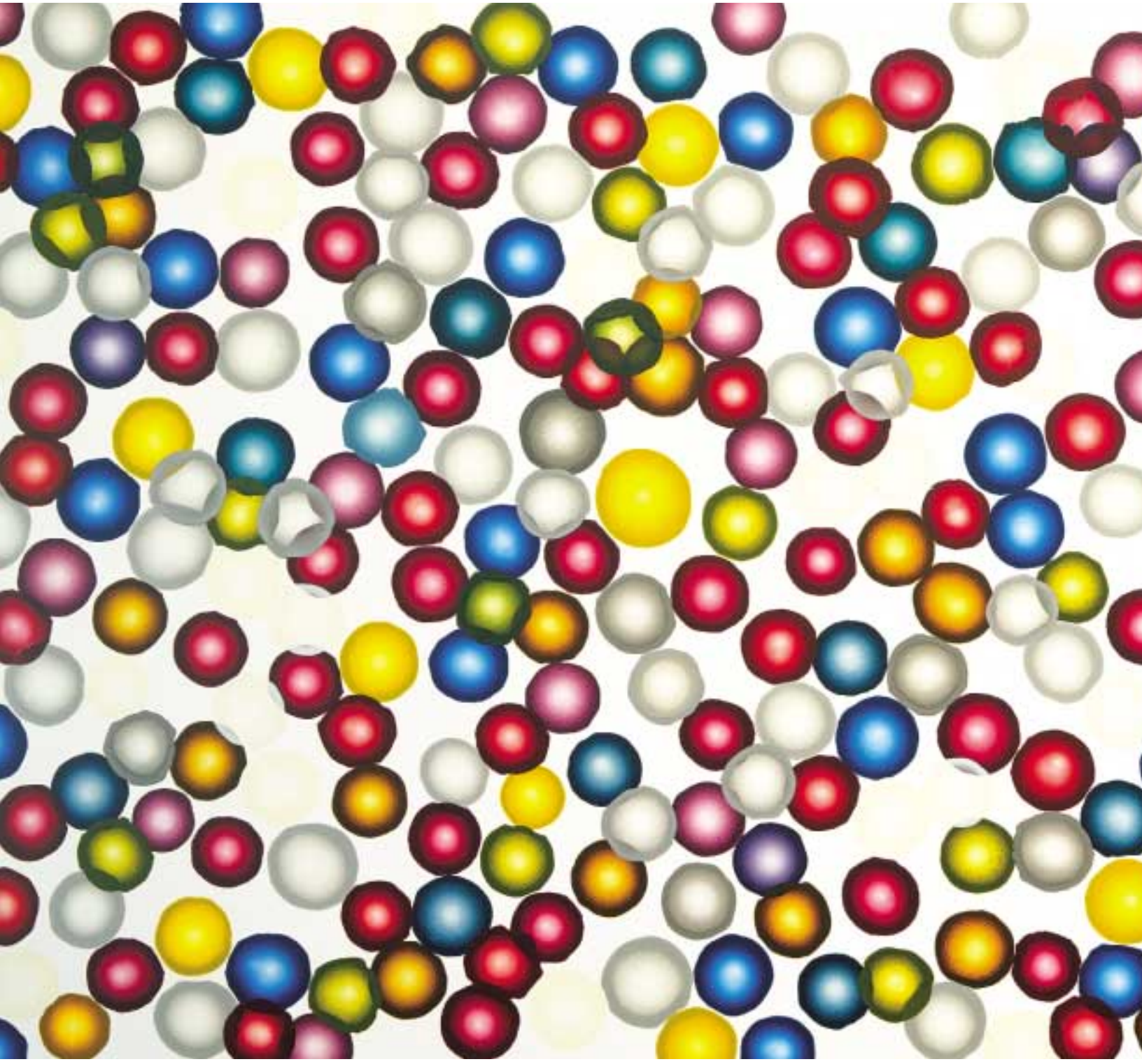
about the art

The fine art featured in this annual report, along with the photographs, are by artist Ross Bleckner.

Bleckner first became prominent in the art world in the 1980s as a reviver of the tradition of oil painting. His masterly use of light and his craftsman-like techniques often draw comparisons to the works of the old masters. Bleckner began The Cell Paintings, the series featured in this annual report, in the late 1990s.

Born in 1949 in New York City, Bleckner made his New York debut in 1975. Since then, his work has been exhibited in solo and group exhibitions at major galleries and museums around the world. In 1995, he had a career retrospective at the Guggenheim Museum in New York.

HUMAN GENOME SCIENCES



DEDICATED TO DISCOVERY FOR HEALTH

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