SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

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

For the Fiscal Year Ended December 31, 2004

Commission File No. 0-30171

SANGAMO BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Delaware	**8731**	**68-0359556**
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Identification Number)*	*(I.R.S. Employer Classification Code Number)*

501 Canal Boulevard, Suite A100
Richmond, CA 94804
(510) 970-6000
(Address, including zip code, and telephone number, including area code, of the registrant's principal executive offices)

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

Securities registered pursuant to Section 12(g) of the Act:

Common stock $.01 par value
(Title of Class)

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2). Yes ☑ No o

The aggregate market value of the voting stock held by non-affiliates of the Registrant on June 30, 2004, based on the closing sale price as reported by the Nasdaq National Market of the Company's Common Stock, was approximately $111,636,397.

The total number of shares outstanding of the Registrant's Common Stock was 25,354,183 as of February 14, 2005.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for its 2005 Annual Meeting of Stockholders (the "2005 Proxy Statement") are incorporated by reference into Part III of this Form 10-K.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Some statements contained in this report are forward-looking with respect to our operations, economic performance and financial condition. Statements that are forward-looking in nature should be read with caution because they involve risks and uncertainties, which are included, for example, in specific and general discussions about:

- our strategy;
- sufficiency of our cash resources;
- product development and commercialization of our products;
- clinical trials;
- revenues from existing and new collaborations;
- our research and development and other expenses;
- our operational and legal risks; and
- our plans, objectives, expectations and intentions and any other statements that are not historical facts.

Various terms and expressions similar to them are intended to identify these cautionary statements. These terms include: “anticipates,” “believes,” “continues,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “seeks,” “should” and “will.” Actual results may differ materially from those expressed or implied in those statements. Factors that could cause these differences include, but are not limited to, those discussed under “Risks Related to Our Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Sangamo undertakes no obligation to publicly release any revisions to forward-looking statements to reflect events or circumstances arising after the date of this report. Readers are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K.

PART I

Item 1. *Business*

Company Overview and Business Strategy

Background

Sangamo is a leader in the research, development, and commercialization of DNA binding proteins for the therapeutic regulation and modification of disease-associated genes. Our proprietary technology platform is based on the engineering of a naturally occurring class of proteins referred to as zinc finger DNA binding proteins (ZFPs). We believe that ZFPs can be targeted to virtually any gene in the human genome or the genome of any other organism. Our scientists use engineered ZFPs to make ZFP transcription factors, or ZFP TFs, which are proteins that bind to DNA and are able to turn genes on or off (see Figure A). Additionally, ZFPs may be engineered to create zinc finger nucleases (ZFNs). Engineered ZFNs can cut genomic DNA at a preselected location, facilitating either ZFN mediated gene correction of genes, that contain disease-causing mutations, or disruption of genes that facilitate or are responsible for disease pathology.

The pharmaceutical industry has invested billions of dollars to discover and validate new genomic targets over the last several years. While there have been several notable successes, in many cases it has proven difficult to identify small-molecule drugs, monoclonal antibodies or recombinant proteins which can therapeutically modulate these targets in man. We believe that our ZFP technology platform constitutes a new therapeutic approach enabling the regulation of validated drug targets that have proven intractable to conventional methods of drug discovery. Sangamo, by enabling the development of ZFP Therapeutic products based on gene regulation or modification of such targets at the DNA level, is focused on establishing the first new therapeutic product development technology platform in the post-genomic era. One of our corporate partners, Edwards Lifesciences (Edwards), has initiated a Phase I clinical study to evaluate the safety and preliminary efficacy of a proprietary Sangamo ZFP Therapeutic for the treatment of peripheral artery disease (PAD). We have also filed an Investigational New Drug (IND) application with the U.S. Food and Drug Administration (FDA) and plan to initiate our own Phase I clinical trial of a ZFP Therapeutic in patients with diabetic neuropathy within the first quarter of 2005. We have also initiated preclinical animal studies of ZFP Therapeutics in congestive heart failure, nerve regeneration and neuropathic pain. In addition, we have research-stage programs in HIV, sickle cell anemia, X-linked severe combined immunodeficiency (X-linked SCID), Wiskott Aldrich Syndrome, age-related macular degeneration, and cancer immunotherapy.

Going forward, we intend to invest the majority of our financial and scientific resources in the therapeutic applications of our ZFP technology. Notwithstanding our therapeutic focus, we believe the potential commercial applications of ZFPs are broad-based and range from human therapeutics and drug discovery to protein pharmaceutical production and the engineering of commercial crop plants. Our business model permits us to capitalize on the ZFP platform by facilitating the sale or licensing of ZFP TFs or ZFNs to companies working in any of these fields. For instance, Sangamo is supplying its pharmaceutical partners Medarex Inc. and, most recently, Pfizer Inc. with ZFP engineered cells for the enhanced production of therapeutic proteins, an advance that could substantially increase the efficiency of pharmaceutical protein production. In addition, Sangamo has provided companies such as LifeScan, a Johnson & Johnson company, with ZFP TFs to aid in the development of new therapeutic treatments for diabetes in the emerging field of regenerative medicine. Finally, our ZFP technology has been demonstrated to enable precise changes in the genomes of crop plants for commercially desirable traits.

We have amassed a substantial proprietary position in the design, selection, composition, and use of engineered ZFPs to support all of these commercial products. We either own outright or have licensed the commercial rights to approximately 58 patents issued in the United States and foreign national jurisdictions, and we have 178 patent applications pending worldwide. We continue to license and file new patent applications that strengthen our core and accessory patent portfolio. We believe that our proprietary position will protect our ability to research, develop, and commercialize products and services based on ZFP technology across our chosen applications.

Over the last 3 years, we have increasingly focused our company on ZFP Therapeutic product development and have recruited experienced scientists and managers with substantial product development experience. We filed Sangamo's first IND application in January 2005 and, working with Edwards Lifesciences, played an important role in the filing of their ZFP Therapeutic IND application in February 2004. We are also building our capabilities in preclinical development, regulatory affairs and clinical research and are applying these capabilities across our product development programs. These include programs in cardiovascular disease, neurological disorders, cancer immunotherapy, the treatment of infectious diseases such as HIV infection, and monogenic diseases (diseases caused by deleterious DNA sequence mutations within single genes) such as X-linked SCID and sickle cell anemia.

DNA, Genes, and Transcription Factors

DNA is present in all cells, except mature erythrocytes, and encodes the inherited characteristics of all living organisms. A cell's DNA is organized in chromosomes as thousands of individual units called genes. Genes encode proteins, which are assembled through the process of transcription — whereby DNA is transcribed into ribonucleic acid (RNA) — and, subsequently, translation — whereby RNA is translated into protein. DNA, RNA, and proteins comprise many of the targets for pharmaceutical drug discovery and therapeutic intervention at the molecular level.

The human body is composed of specialized cells that perform different functions and are thus organized into tissues and organs. All somatic cells in an individual's body contain the same set of genes. However, only a fraction of these genes are turned on, or expressed, in an individual human cell at any given time. Genes are activated or repressed in response to a wide variety of stimuli and developmental signals. Distinct sets of genes are expressed in different cell types. It is this pattern of gene expression that determines the structure, biological function, and health of all cells, tissues, and organisms. The aberrant expression of certain genes can lead to disease.

Transcription factors are proteins that bind to DNA and regulate gene expression. A transcription factor recognizes and binds to a specific DNA sequence within or near a particular gene and causes that gene to be activated or repressed. In higher organisms, transcription factors typically comprise two principal domains: the first is a DNA binding domain, which recognizes a target DNA sequence and thereby directs the transcription factor to the proper chromosomal location; the second is a functional domain that causes the target gene to be activated or repressed (see Figure A). The two-component structure of our engineered ZFP TFs is modeled on this naturally occurring structure of transcription factors in all higher organisms.

The Two Domain Structure of a ZFP Therapeutic

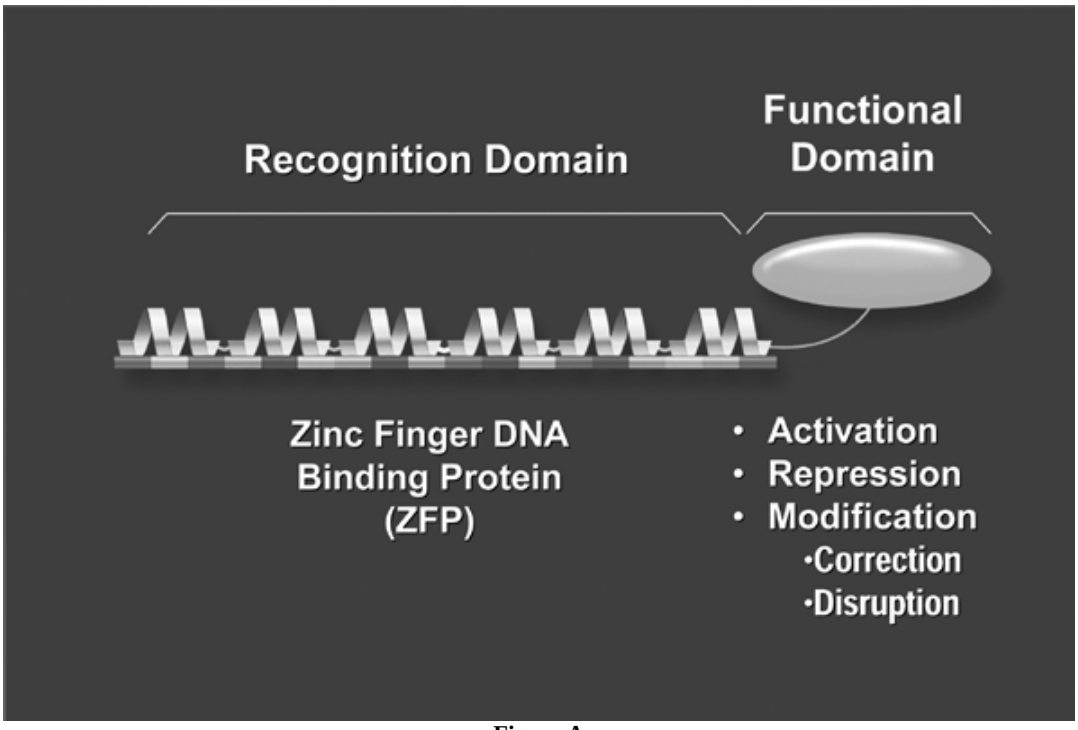

Figure A

Engineered Zinc Finger Protein Transcription Factors (ZFP TFs) for Therapeutic Gene Regulation

Consistent with the two-domain structure of ZFP TFs, we take a modular approach to their design. The recognition domain is typically composed of three or more zinc fingers; each individual finger recognizes and binds to a three base pair sequence of DNA, and multiple fingers can be linked together to recognize longer stretches of DNA. By modifying the amino acids of a ZFP that directly interact with DNA, we can engineer novel ZFPs capable of recognizing pre-selected DNA sequences within or near virtually any gene.

The ZFP DNA binding domain is coupled to a functional domain, creating a ZFP TF capable of controlling or regulating a target gene in the desired manner. For instance, an activation domain causes a target gene to be “turned on.” Alternatively, a repression domain causes the gene to be “turned off.” We believe that we can control the duration of the effects of ZFP TFs by several methods. ZFP TFs may be delivered by using different gene transfer systems that allow them to be briefly (transiently), or continuously expressed in a cell. We can also engineer ZFP TFs with functional domains that allow their activity to be controlled by the administration of a small-molecule drug. Finally, we can engineer ZFP TFs with repression domains that are able to reduce gene expression and, in some cases, even silence their target genes.

To date, we have designed, engineered, and assembled several thousand ZFPs and have thoroughly tested the majority of these proteins for their affinity, or tightness of binding to their DNA target, as well as their specificity, or preference for their intended DNA target. We have developed standardized methods for the design, selection, and assembly of ZFPs capable of binding to a wide spectrum of DNA sequences and genes. We have linked ZFPs to numerous functional domains to create gene-specific ZFP TFs and have demonstrated the ability of these ZFP TFs to regulate hundreds of genes in dozens of different cell types and directly in whole organisms, including mice, rats, rabbits, pigs, plants, fruit flies, worms, and yeast. Sangamo scientists

and collaborators have published extensively in peer-reviewed scientific journals on the transcriptional function of ZFP TFs and the resulting changes in the behavior of the target cell, tissue, or organism.

Engineered ZFNs for Therapeutic Gene Modification: Gene Correction and Gene Disruption

The ZFP DNA binding domain may also be coupled to the cleavage domain of a restriction endonuclease — an enzyme that cuts DNA — creating a zinc finger nuclease or ZFN. Using the DNA binding domain of an engineered ZFP to target the nuclease to a chosen location, we can design a ZFN to generate a physical break at a defined location in the DNA sequence of a target gene. This targeted break in the DNA can be manipulated to effect two different outcomes, either to facilitate the replacement of the disease-causing mutation with a “normal” or “corrected” DNA sequence or to disrupt the disease-related gene resulting in the expression of a truncated or non functional protein. We believe that ZFN-mediated gene correction will allow the corrected gene to be expressed in its natural chromosomal context and may provide a safe and effective approach to the precise repair of DNA sequence mutations responsible for monogenic diseases such as X-linked SCID and sickle cell anemia. Similarly, ZFN-mediated gene modification may permit the targeted disruption of a gene that is involved in disease pathology such as disruption of the CCR5 gene to treat HIV infection.

A Novel Class of Human Therapeutics

With our ability to deliver gene-specific ZFP TFs and ZFNs for the activation, repression, correction, or disruption of target genes and DNA sequences, we are poised to develop a novel class of highly differentiated human therapeutics. We believe that as more genes are validated as high-value therapeutic targets, the clinical breadth and scope of ZFP Therapeutic applications may prove to be substantial.

Following the genomics revolution of the 1990s, the sequencing and publication of the human genome, and the industrialization of genomics-based drug discovery, pharmaceutical and biotechnology companies have validated and characterized hundreds of new drug targets. However, these companies have had mixed results in translating these targets into lead product candidates or products which have advanced to clinical trials. There are many new drug targets which, although they have a clear role in disease processes, cannot be bound or modulated by small molecules with drug-like properties. Alternative therapeutic approaches may be required to modulate the biological activity of these so-called “non-druggable” targets. This may create a significant clinical and commercial opportunity for the therapeutic regulation or modification of disease-associated genes using engineered ZFP TFs or ZFNs.

ZFP Therapeutics provide a new approach to non-druggable targets. ZFP TFs act through a mechanism that is unique among biological drugs: direct regulation of the “disease” gene as opposed to the protein target encoded by that gene. Thus, a protein target which may be intractable to small molecule control can instead be “turned on” or “turned off” at the DNA level. Engineered ZFP TFs are the only class of therapeutic molecules that act directly through the regulation of gene expression at the DNA level. This mode of action is not available to antisense RNA, siRNA, conventional small molecules, antibodies, or other protein pharmaceuticals.

Therefore, we believe that ZFP Therapeutics provide a unique and proprietary approach to therapeutic design and have significant competitive advantages over small-molecule drugs, protein pharmaceuticals, and conventional gene therapy:

- ZFP Therapeutics act at the DNA level to regulate or modify gene expression, allowing direct modulation of the gene;
- ZFP Therapeutics circumvent the “non-druggable” properties of many drug targets;
- ZFP TFs can either activate or repress therapeutic gene targets;
- ZFP TFs can activate or repress the expression of all variant proteins (isoforms) encoded by a particular gene;

- ZFP TFs may themselves be expressed either transiently, for acute indications, or longer term, for chronic conditions;
- ZFNs can be used to correct genes responsible for monogenic diseases or disrupt genes involved in disease processes; and
- Permanent gene correction or disruption requires only transient cellular expression of ZFNs.

ZFP Therapeutic Gene Correction of Monogenic Disease

Genetic diseases such as X-linked SCID, sickle cell anemia, and Wiskott Aldrich are caused by deleterious DNA sequence mutations within single genes. “Gene Correction” is the process by which a mutation, or disease-causing DNA sequence, can be repaired with the “correct” DNA sequence, restoring normal gene function. Our engineered ZFPs can be attached to nuclease domains to create ZFNs. The ZFN is able to “recognize” its intended gene target through its engineered (ZFP) DNA binding domain (Figure A). However, instead of regulating the expression of the target gene (as with a ZFP TF), the ZFN causes the gene to be cut near the ZFP binding site, triggering a repair process and facilitating the incorporation of the corrected DNA sequence into the chromosomal location where the disease-related mutation previously existed. A segment of DNA or “donor sequence” that encodes the correct gene sequence is also introduced into the cell to provide a template for the correction of the cellular gene.

The process of gene correction occurs naturally and is called homologous recombination (HR). While gene correction has been pursued in academic research laboratories for over a decade, its clinical application has been limited by the low efficiency of HR, the biological process of gene repair. HR occurs naturally at a rate of approximately once in every one million cells receiving the DNA donor sequence; this rate is too low to be of clinical use. However, with our collaborators, we have shown that the use of engineered ZFNs to cleave the target gene near the defective sequence can increase the efficiency of targeted HR by several thousand times. ZFP Therapeutic gene correction is a revolutionary technical approach to gene repair because ZFNs, like all ZFPs, can be engineered to recognize virtually any target gene in the human genome. We are working to generate the preclinical data necessary to evaluate the potential utility of this approach for X-linked SCID and hemoglobinopathies such as sickle cell anemia and β-thalassemia.

ZFP Therapeutic Gene Disruption for Infectious Diseases

ZFNs can also be used to disrupt a gene sequence. This may have therapeutic applications in diseases such as HIV and hepatitis C viral infections. To effect ZFN-mediated gene disruption, ZFNs are introduced into cells without an added DNA donor sequence. Under these circumstances, introduction of a double stranded break in the cellular gene prompts the cell’s repair machinery to rejoin the two broken ends of the DNA disrupting the gene’s normal coding sequence. This disruption frequently results in a shortened or non-functional protein product. In the case of HIV we are using this approach to disrupt the gene that encodes a cellular protein, CCR5, which is an essential co-factor for HIV infection of T-cells and other cells of the immune system.

THERAPEUTIC PRODUCT DEVELOPMENT

Product Development Strategy

Over the last several years, we have shown that ZFP TFs can be engineered to bind their target genes with an optimal level of affinity and specificity and can regulate these targets in a way that causes the desired effect at the levels of target cell, tissue, and organism. We have extended these results to preclinical animal models of disease, including mice, rats, rabbits, and pigs. We have published some of these data in peer-reviewed journals. In February 2004, our partner, Edwards Lifesciences, submitted some of these data to the United States Food & Drug Administration (FDA) along with preclinical toxicology and biodistribution data as part of an IND application to support a Phase I clinical study. The Edwards study is designed to investigate the safety and preliminary efficacy of a ZFP TF designed to up-regulate the expression of vascular endothelial growth factor A (VEGF-A) in patients with the intermittent claudication stage of Peripheral Arterial

Disease (PAD). The Phase I clinical trial is ongoing under the supervision of Robert J. Lederman, M.D., of the National Heart, Lung and Blood Institute, National Institutes of Health (NIH). In addition, in January 2005, Sangamo submitted an IND for a Phase I clinical study to investigate the safety and preliminary efficacy of a ZFP TF designed to up-regulate the expression of VEGF-A in patients with diabetic neuropathy (DN). We expect this trial to begin in the first quarter of 2005. We intend to develop the additional preclinical data to support the development of ZFP Therapeutics for cardiovascular disease, infectious diseases including HIV infection, neuropathic pain, nerve regeneration, cancer, and monogenic diseases including X-linked SCID and hemoglobinopathies such as sickle cell anemia and ß-thalassemia.

Product Development Programs

In addition to the Phase I clinical trial to evaluate the safety of a ZFP Therapeutic for the treatment of peripheral PAD and an IND application to initiate the Phase I DN clinical trial, we currently have three preclinical-stage programs (i.e., lead ZFP TF molecules in animal efficacy studies) and six research-stage programs (i.e., cell-based testing to identify and optimize lead ZFP TF or ZFN molecules for testing in animals).

Clinical Indication	Development Stage	Therapeutic Approach	Comments
Peripheral artery disease (PAD) Intermittent claudication	Phase I clinical trial	ZFP TF (EW-A-401) up-regulation of VEGF-A to induce angiogenesis, or blood vessel formation, in the lower extremities	Sponsored by our partner, Edwards Lifesciences; evaluating product safety and preliminary evidence of increase in blood flow in lower extremities of patients with intermittent claudication.
Diabetic neuropathy (DN)	IND filed January 2005	ZFP TF (SB-509) up-regulation of VEGF-A to protect and induce growth of neuronal cells	Evidence from animal models suggests that up-regulation of endogenous VEGF- A directly induces the growth and repair of neuronal cells. Trial is designed to evaluate product safety and preliminary trends in efficacy.
Peripheral artery disease (PAD) Critical limb ischemia	Preclinical animal efficacy completed	ZFP TF up-regulation of VEGF-A to induce angiogenesis, or blood vessel formation, in the lower extremities	Sponsored by our partner, Edwards Lifesciences who has indicated that they intend to initiate a Phase I clinical trial in the more severe form of PAD at Duke University Medical School in 2005.
Ischemic heart disease (IHD)	Preclinical (animal efficacy)	ZFP TF up-regulation of VEGF-A to induce angiogenesis in the ischemic heart	Sponsored by our partner, Edwards Lifesciences; currently evaluating the preclinical efficacy of up-regulation of VEGF-A to induce angiogenesis in a porcine model of blood flow restriction. Edwards has indicated that they expect to have completed animal efficacy studies in 2005 and may initiate a clinical trial at Yale University School of Medicine.

Clinical Indication	Development Stage	Therapeutic Approach	Comments
Human immunodeficiency virus (HIV) infection and Acquired immune deficiency syndrome (AIDS)	Research (cell-based studies)	ZFN-mediated disruption of CCR5 gene in circulating T-cells, dendritic cells and stem cells from patients infected with HIV	A well-documented mutation in CCR5 (CCR5 D32) exists in humans and confers resistance to HIV infection. Sangamo scientists currently optimizing use of ZFN gene disruption to recapitulate the effects of this mutation in immune cells.
Congestive heart failure (CHF)	Preclinical (animal efficacy)	ZFP TF down- regulation of phospholamban (PLN) to increase the contractility of heart muscle	Evidence from cellular and transgenic animal models suggests that phospholamban plays a critical role in congestive heart failure. Sangamo scientists currently evaluating the preclinical efficacy of PLN repression to increase the contractility of heart muscle in a rat model of congestive heart failure
X-linked severe combined immunodeficiency (X-linked SCID)	Research (cell-based studies)	ZFN-mediated correction of IL2Rγ mutations in stem cells from patients with X-linked SCID	X-linked SCID is caused by loss-of- function mutations in the IL2Rγ gene. Sangamo scientists currently optimizing conditions for efficient gene correction in CD34+ cells.
Neuropathic pain (initial indication: severe cancer-related pain)	Preclinical (animal efficacy)	ZFP TF down- regulation of cell surface receptors involved in pain signaling	Several pain targets have been identified and validated. Sangamo scientists currently evaluating various formulations of ZFP TFs for the down-regulation of cell surface receptor (TrkA), and ion-channel (PN3) to choose the optimal ZFP TF and target receptor
Sickle cell anemia (SCA)	Research (cell-based studies)	ZFN-mediated correction of the ß-globin mutation in stem cells from patients with SCA	Bone marrow transplantation is currently the only efficacious therapy available for SCA patients; however, most patients lack matched donors. Currently optimizing conditions for efficient gene correction at this locus in CD34+ cells
Nerve regeneration (nerve crush and spinal cord injury, amyotrophic lateral sclerosis (ALS)	Preclinical (animal efficacy)	ZFP TF up-regulation of VEGF-A to induce nerve regeneration	Sangamo scientists and collaborators are evaluating delivery methods and dosing of ZFP TF.

Clinical Indication	Development Stage	Therapeutic Approach	Comments
Cancer immunotherapy	Research (cell-based studies)	ZFP TF up-regulation of GM-CSF and PEDF to induce an antitumor immune response combined with an anti-angiogenic factor.	Sangamo scientists evaluating the combination of ZFP TFs and replication incompetent adenoviral vector as a means to stimulate a cell-mediated, antitumor response and reduce the vascularization of the tumor mass.
Age-related macular degeneration (AMD)	Preclinical (animal efficacy)	ZFP TF antiangiogenic approach; ZFP TF mediated up- regulation of PEDF and down regulation of VEGF-A in the eye	Sangamo scientists evaluating a combination of ZFP TFs to inhibit angiogenesis.
Wiskott-Aldrich Syndrome (WAS)	Research (cell-based studies)	ZFN-mediated correction of the X- linked genetic mutation in the WAS gene in stem cells from infected patients	Sangamo scientists currently optimizing conditions for efficient gene correction at this locus in CD34+ cells
ß-Thalassemia	Research (cell-based studies)	ZFN-mediated correction of the genetic mutation in the ß-globin gene in stem cells from patients	Sangamo scientists currently optimizing conditions for efficient gene correction at this locus in CD34+ cells

Table 1. Clinical indications currently targeted by Sangamo's clinical, preclinical, and research-stage ZFP Therapeutic product development programs.

Peripheral Artery Disease (PAD)

PAD is the result of inadequate arterial blood flow to the lower extremities. It is seen as a spectrum of disease, beginning with asymptomatic reduction in blood flow to the leg; followed by the development of intermittent claudication, which limits walking distance; followed by pain in the absence of exercise (resting pain); finally leading to tissue damage and severely impaired mobility (critical limb ischemia). The condition affects 8-12 million people in the United States. 80% of these patients have intermittent claudication and do not progress to resting pain or critical limb ischemia. This program is funded and managed by our development partner, Edwards Lifesciences, who filed an IND application in February 2004 and initiated a Phase I clinical trial in August, 2004 to treat intermittent claudication. Edwards has subsequently stated that they have completed preclinical efficacy experiments and expect to initiate a Phase I human clinical trial in critical limb ischemia, the more severe form of PAD, in 2005 at Duke University.

Diabetic Neuropathy (DN)

Diabetic peripheral sensory and motor neuropathy is one of the most frequent complications of diabetes. Symptoms include numbness, tingling sensations and pain particularly in the toes or feet. This is gradually replaced by loss of sensation and motor function as nerve damage progresses. Ulcers and sores may appear on

numb areas of the foot or leg because pressure or injury goes unnoticed. Despite adequate treatment, these areas of trauma frequently become infected and this infection may spread to the bone, necessitating amputation of the leg or foot. More than 60% of non-traumatic lower-limb amputations in the United States occur among people with diabetes. In the period from 2000 to 2001 this translated to approximately 82,000 amputations. The American Diabetes Association estimates that there are approximately 18.3 million people with diabetes in the United States and that of those about 60% to 70% have mild to severe forms of neuropathy. According to the Centers for Disease Control (CDC), diabetes is becoming more common in the United States. From 1980 through 2002, the number of Americans with diabetes more than doubled.

Apart from rigorous control of blood glucose, the only therapies approved by the FDA for the treatment of diabetic neuropathy are analgesics and antidepressants that address only the symptoms and do not retard or reverse the progression of the disease. VEGF A has been demonstrated to have direct neuroproliferative, neuroregenerative and neuroprotective properties. Administration of recombinant VEGF-A or the cDNA encoding VEGF-A has been observed to retard or partially reverse the condition in preclinical animal models of diabetic neuropathy. We have completed preclinical studies of VEGF-A activation in similar preclinical models to confirm and extend these findings by using our ZFP Therapeutic SB-509, which is designed to up-regulate the chromosomal VEGF-A gene. In January 2005, Sangamo filed an IND with the FDA for SB-509, a ZFP TF activator of VEGF-A, for the treatment of mild to moderate diabetic neuropathy. We expect to begin a multicenter Phase I, single blind, dose-escalation trial to measure the laboratory and clinical safety of SB-509 in patients in the first quarter of 2005.

Ischemic Heart Disease (IHD)

IHD results from inadequate blood flow to the heart. The most common manifestation of this disease is angina, or the onset of chest pain with exercise. Macrovascular therapy, in the form of percutaneous coronary intervention (angioplasty) or coronary artery bypass grafting, is available to treat angina; however, patients with downstream blood flow restrictions do not benefits from these interventions. Patients who are poor candidates for a revascularization procedure may be candidates for a biological drug designed to up-regulate the expression of VEGF-A. There are approximately 1.1 million revascularization procedures in the United States each year, and we believe that a significant fraction of these patients could potentially benefit from a less invasive, therapeutic angiogenesis product. Our IHD program is funded and managed by our partner, Edwards Lifesciences, and utilizes the same VEGF-targeted ZFP TF as the PAD program. In December 2004, Edwards stated that they expect to complete preclinical animal efficacy studies in 2005 and, based upon those data, potentially to initiate a human clinical trial to evaluate safety of a ZFP-TF activator of VEGF-A to treat post-myocardial IHD at Yale University School of Medicine.

Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS)

The CDC estimates that in 2004 there were 39 million people world-wide living with HIV infection. Of those individuals, 5 million people were newly infected with the virus. An estimated 3 million people died of AIDS in the same year. In the United States alone it is estimated that there were 1.0 million people living with HIV/AIDS, 44,000 new infections and 16,000 deaths in 2004.

HIV infection results in the death of immune system cells and thus leads to AIDS, a condition in which the body's immune system is depleted to such a degree that the patient is unable to fight off common infections. Ultimately, these patients succumb to opportunistic infections or cancers. CCR5 is the co-receptor for HIV entry into T-cells and CCR5 is not expressed on their surface, HIV cannot infect these cells. A population of individuals that is immune to HIV infection, despite multiple exposures to the virus, has been identified and extensively studied. They have a natural mutation, CCR5Δ32, that results in the expression of a shortened, or truncated, and non-functional CCR5 protein. This mutation appears to have no observable deleterious effect on the growth or survival or these individuals. We are using our ZFN-mediated gene disruption technology to disrupt the CCR5 gene in cells of a patient's immune system to make these cells permanently resistant to HIV infection. The aim is to provide a population of HIV-resistant cells that can fight opportunistic infections. In collaboration with scientists at the University of Pennsylvania and the University

of Los Angeles California, UCLA, we are pursuing both ex-and in-vivo approaches in T-cells and hematopoietic stem cells.

Congestive Heart Failure (CHF)

CHF is a gradual and long-term loss of pumping capacity by the heart that results in the backup of blood and fluid (edema) in the lungs and other tissues and organs. This fluid congestion can cause shortness of breath, coughing, swelling of the abdomen and extremities, fatigue, kidney damage, and kidney failure. The incidence and prevalence of CHF are increasing at an alarming rate, with approximately 550,000 new cases in the United States each year and a current patient population of more than 5 million Americans. There is strong scientific evidence to suggest that down-regulation of the gene encoding phospholamban (PLN) in the heart can improve the contractility of heart muscle in mammalian animal models of CHF. We have identified a lead ZFP TF repressor of PLN expression for the CHF program and have ongoing preclinical studies in rodent models of CHF.

X-linked Severe Combined Immunodeficiency (X-linked SCID)

X-linked SCID is a rare, inherited genetic disease leading to severe T-cell and B-cell dysfunction, severe infection, and often death by the age of 2 years. This is the most common form of SCID affecting nearly 50% of all cases. Patients suffering from X-linked SCID harbor a mutation in the gene encoding the gamma chain of the interleukin-2 receptor γ chain (IL2Rγ). Sangamo scientists are using ZFN-mediated gene correction in an effort to repair this genetic lesion in hematopoietic stem cells and to use these corrected cells to reconstitute a patient's immune system.

Neuropathic Pain (Cancer Pain)

Neuropathic pain comprises a set of chronic pain disorders that cannot be connected to a physical trauma, as is the case with acute pain. There are several million patients with neuropathic pain in the United States including late-stage cancer patients. Studies have shown that 90% of patients with advanced cancer experience severe pain, and that pain occurs in 30% of all cancer patients regardless of the stage of the disease. Pain usually increases as cancer progresses. The most common cancer pain is from tumors that metastasize to the bone. As many as 60–80% of cancer patients with bone metastasis experience severe pain. The second most common cancer pain is caused by tumors infiltrating nerves. Tumors near neural structures may cause the most severe pain. The few drugs currently being used to treat pain in these patients show marginal efficacy and can have very significant side effects. Chronic pain is a major and underserved market opportunity and is now an area of intense focus by pharmaceutical researchers owing to the discovery of several new pain-related pathways and drug targets. Recent studies have shown that in chronic pain, certain proteins in nerve cell membranes are up-regulated or over-expressed. Our scientists have identified ZFP TF product candidates that repress the expression of two of these pain targets in cell-based models. We are incorporating these ZFP TFs into gene transfer vectors for testing in pain models during 2005.

Sickle Cell Anemia (SCA)

SCA is caused by a mutation in the human β-globin gene that alters the solubility of hemoglobin under certain physiological conditions. The ensuing disease is characterized by chronic hemolytic anemia with episodes of severe pain and tissue damage often resulting in kidney failure, liver disease, stroke, and other complications. According to the National Heart, Lung and Blood Institute of the NIH, approximately 72,000 people in the U.S. have sickle cell disease. Moreover, approximately 2.5 million Americans carry the sickle cell trait. Although there is still no adequate general long-term treatment or cure, some patients may benefit from bone marrow transplantation. However, very few patients have matched donors, and the risks of infection and toxicity are quite high. Sangamo scientists and collaborators are developing methods for ZFN-mediated correction of the β-globin gene mutation that causes sickle cell anemia. We are collaborating on this program with the Children's Hospital of Oakland Research Institute.

β-Thalassemia

β-Thalassemia is an inherited blood disorder that causes mild or severe anemia due to reduced hemoglobin and fewer red blood cells than normal. β-Thalassemia is caused by a mutation in the genes that code for β-hemoglobin. Severe forms of thalassemia are usually diagnosed in early childhood and are lifelong conditions. Currently, severe forms of thalassemia are treated by regular blood transfusions on a schedule (often every 2-4 weeks) to keep hemoglobin and red blood cell numbers at normal levels. Transfusion therapy, while lifesaving, is expensive and carries a risk of transmission of viral and bacterial diseases (for example, hepatitis). It also leads to excess iron in the blood (iron overload), which can damage the liver, heart, and other parts of the body. To prevent damage, iron chelation therapy is needed to remove excess iron from the body. Sangamo scientists and collaborators are developing methods for ZFN-mediated correction of the β-globin gene mutation that causes β-Thalassemia.

Nerve Regeneration

Nerves are fragile and can be damaged by disease, pressure, stretching, or cutting. While recent advances in emergency care and rehabilitation allow many patients suffering from a nerve injury or neurodegenerative disease to survive for longer periods and live with their condition, there are currently no therapeutic options for restoring nerve function. The spectrum of direct nerve injuries ranges from “pinched” nerves, e.g. sciatica, to outright spinal cord severance. Neurodegenerative conditions include such disorders as amyotrophic lateral sclerosis (ALS), also called Lou Gehrig’s disease, which is a progressive, fatal neurological disease affecting as many as 30,000 Americans, with 5,600 new cases occurring in the United States each year. ALS occurs when specific nerve cells in the brain and spinal cord that control voluntary movement gradually degenerate. The loss of these motor neurons causes the muscles under their control to weaken and waste away, leading to paralysis. VEGF-A has been demonstrated to have direct neuroproliferative, neuroregenerative and neuroprotective properties. Evidence from preclinical and clinical studies using VEGF-A suggests that the targeted up-regulation of VEGF-A could be a viable approach to the treatment of degenerative nerve disease, crush injuries and may eventually be extended to spinal cord injury. In collaboration with several academic labs, we are evaluating ZFP TFs that activate the VEGF A gene in pre-clinical animal efficacy models of nerve damage and disease.

Cancer immunotherapy

The American Cancer Society estimates that the incidence of new cancer cases was approximately 1.3 million in 2004, with 565,500 cancer deaths, accounting for 1 of every 4 deaths in the United States. An increasing number of genes are being identified that appear to be important to the development and spread of many forms of cancer. We believe our ZFP TF technology has potential applications in cancer therapy, both in regulating endogenous genes and in activating the body’s natural mechanisms for fighting disease. Sangamo scientists are engineering replication incompetent adenoviral vectors to deliver ZFP TFs that up-regulate granulocyte macrophage colony-stimulating factor (GM-CSF) and pigment epithelial derived factor (PEDF). GM-CSF is a powerful immunostimulator and has been shown to augment anti-tumor immune responses. PEDF is a potent antiangiogenic factor that blocks the angiogenic function of VEGF. We believe that this approach may be used to treat cancer both at the tumor site and systemically.

Age-related Macular Degeneration (AMD)

AMD is the leading cause of blindness in the United States. The “wet” form of the disease is responsible for most (90%) of the severe loss of vision and is caused by growth of abnormal blood vessels under the central part of the retina or macula. These new blood vessels may then bleed and leak fluid, causing the macula to bulge or lift up, thus distorting or destroying central vision. The Macular Degeneration Foundation estimates that there are approximately 200,000 new cases of wet macular degeneration in the United States each year. Each year 1.2 million of the estimated 12 million people in the US with macular degeneration will suffer severe central vision loss. Each year 200,000 individuals will lose all central vision in one or both eyes. Sangamo scientists are developing ZFP TFs to inhibit blood vessel growth, or angiogenesis, within the eye. They have identified ZFP TFs that can activate the expression of the gene for Pigment Epithelium Derived

Factor (PEDF), a factor known to inhibit the growth of blood vessels and ZFP TFs that can inhibit the expression of VEGF-A, a potent angiogenic factor. These factors will be tested in combination in preclinical animal models of AMD.

Wiskott Aldrich Syndrome (WAS)

WAS is an immune deficiency disease involving both T and B-lymphocytes and platelets, the blood cells that help control bleeding. The syndrome is a result of a mutation in the gene that encodes the Wiskott Aldrich Syndrome protein, or WASp. Characteristic symptoms of Wiskott-Aldrich Syndrome may include an increased tendency to bleed caused by a reduced number of platelets, recurrent bacterial, viral and fungal infections, and eczema. As with any immune deficiency, WAS is a serious disease with potential threatening complications. Currently, the only “permanent cure” for WAS is bone marrow or cord blood stem cell transplantation. Sangamo scientists and collaborators are optimizing methods for ZFN-mediated correction of gene mutations that cause WAS in hematopoietic stem cells and to use these corrected cells to reconstitute a patient’s immune system.

Product Development Resources and Infrastructure

As Sangamo continues its transition to a clinical development-stage biotechnology company, we are building our gene delivery capabilities and our capabilities in regulatory affairs, quality assurance and clinical research. Appointments in these areas included the hiring, in August 2004, of Dale Ando, M.D. as Vice President, Therapeutic Development and Chief Medical Officer. Dr. Ando has held senior positions in therapeutic product development in several biotechnology companies and has served on the National Institutes of Health (NIH) Recombinant DNA Advisory Committee (NIH RAC) and the Adenoviral Safety Committee. Our current plan is to establish regulatory affairs, quality assurance and clinical research expertise internally, while relying on third-party contract research organizations and contract manufacturers of ZFP Therapeutic products for toxicology and initial clinical studies. This will serve to minimize our investment in fixed capital while maximizing our flexibility in the selection of gene transfer systems for the delivery of ZFP TF genes. Our manufacturing and quality assurance personnel will oversee and audit the manufacturing and testing of our experimental products at third-party facilities.

CORPORATE RELATIONSHIPS

We are applying our ZFP technology platform to several commercial applications in which our products provide the Company and our strategic partners and collaborators with technical, competitive, and economic advantages. Where and when appropriate, we have established and will continue to pursue ZFP Therapeutic strategic partnerships and Enabling Technology collaborations with selected pharmaceutical and biotechnology companies to fund internal research and development activities and to assist in product development and commercialization. In December 2004, we hired David Ichikawa as Senior Vice President, Business Development. Mr. Ichikawa has more than 20 years of industry experience with both pharmaceutical and biotechnology companies in various commercial areas.

We believe the advancement of our first ZFP Therapeutics into clinical trials in 2004 and early 2005 come at a timely point in the evolution of the worldwide pharmaceutical industry. Large pharmaceutical companies face revenue growth challenges that may compel them to in-license or acquire emerging therapeutic technologies. Our success in advancing the VEGF programs in therapeutic angiogenesis and diabetic neuropathy into Phase I clinical trials may bring attention to the potential of ZFP Therapeutics to address the non-druggable, yet high-value targets residing within pharmaceutical research laboratories today.

Strategic Partnership with Edwards Lifesciences Corporation

In January 2000, we announced a therapeutic product development collaboration with Edwards Lifesciences Corporation. Under the agreement, we have licensed to Edwards, on a worldwide, exclusive basis, ZFP Therapeutics for use in the activation of VEGFs and VEGF receptors in ischemic cardiovascular and vascular diseases. Edwards purchased a $5.0 million note that converted, together with accrued interest, into

333,333 shares of common stock at the time of our initial public offering (IPO) at the IPO price. In March 2000, Edwards purchased a $7.5 million convertible note in exchange for a right of first refusal for three years to negotiate a license for additional ZFP Therapeutics in cardiovascular and peripheral vascular diseases. That right of first refusal was not exercised and terminated in March 2003. Together with accrued interest, this note converted into common stock at the time of our initial public offering at the IPO price. Through 2001, we received $2 million in research funding from Edwards and a $1.4 million milestone payment for delivery of a lead ZFP Therapeutic product candidate. In November 2002, Edwards signed an amendment to the original agreement and agreed to provide up to $3.5 million in research and development funding, including $2.95 million for research and development activities performed in 2002 and 2003. The filing of the IND for PAD in 2004, and the achievement of other research-related milestones in 2003, triggered a total of $1.0 million in milestone payments from Edwards Lifesciences in the first quarter of 2004. We have retained all rights to use our technology for therapeutic applications of VEGF activation outside of ischemic cardiovascular and vascular diseases, including use in wound healing and neurological disorders. Revenues attributable to milestone achievement and collaborative research and development performed under the Edwards agreement were $615,000, $1.5 million and $2.0 million for 2004, 2003 and 2002, respectively. Related costs and expenses incurred for services performed under the Edwards agreement were $1.4 million and $1.9 million and for 2003 and 2002, respectively. There were no costs or expenses incurred under the Edwards agreement during 2004. We have no future commitments related to these agreements. Revenues attributable to milestone achievement and collaborative research and development performed under the Edwards agreement were 47%, 59% and 45% for 2004, 2003 and 2002, respectively, of total revenues earned by Sangamo. As of December 31, 2003 accounts receivable from Edwards represented 76% of our total accounts receivable balance. There were no amounts owed the Company under the Edwards agreements as of December 31, 2004.

In the future, Sangamo may receive milestone payments and royalties under this agreement. We have received $2.5 million in milestone payments to date and we could receive $27 million in additional milestone payments under the agreement if all future milestones are met for the first product developed under the agreement. Any subsequent products developed under the agreement may generate up to $15 million in milestone payments each. We would also receive royalties on any sales of products generated under the agreement and these royalty obligations would continue until the expiration of the last-to-expire patent covering products developed under the agreement on a country-by-country basis. Based on currently issued patents, these royalty obligations would last through January 12, 2019. The development of any products is subject to numerous risks and no assurance can be given that any products will successfully be developed under this agreement. See “Risks Related to our Business — Our gene regulation technology is relatively new, and if we are unable to use this technology in all our intended applications, it would limit our revenue opportunities.”

Under the Sangamo-Edwards agreement, we were responsible for advancing product candidates into preclinical animal testing. Edwards had responsibility for preclinical development, regulatory affairs, clinical development, and the sales and marketing of ZFP Therapeutic products developed under the agreement. Sangamo may receive milestone payments in connection with the development and commercialization of the first product under this agreement and may also receive royalties on product sales. As part of the November 2002 amendment to our original agreement, Edwards Lifesciences also entered into a joint collaboration with us to evaluate ZFP TFs for the regulation of a second therapeutic gene target, phospholamban (PLN), for the treatment of congestive heart failure. Under the amended agreement, Sangamo granted Edwards a right of first refusal to Sangamo’s ZFP TFs for the regulation of PLN. This right of first refusal terminated on June 30, 2004. On August 14, 2003 Edwards and Sangamo entered into a Third Amendment to the original license agreement. Under this amendment, Sangamo received payment for research and development milestones associated with the VEGF and PLN programs.

There is no assurance that the companies will achieve the development and commercialization milestones anticipated in these agreements. Edwards has the right to terminate the agreement at any time upon 90 days written notice. In the event of termination, we retain all payments previously received as well as the right to develop and commercialize all related products.

Enabling Technology Programs

We began marketing our Enabling Technologies to the pharmaceutical and biotechnology industry in 1998. Our Enabling Technology Agreements are based upon the delivery of an engineered ZFP TF that is capable of regulating the expression of a gene for which it is specifically designed and targeted. These agreements typically involve non-exclusive rights to use one or more ZFP TFs for internal research purposes or limited commercial applications.

As the emphasis of our pharmaceutical research and development has shifted away from target validation to the downstream bottlenecks of the drug discovery process, we have refocused our Enabling Technology products and services on two principal areas: supplying our partners with our ZFP technology to enhance the production of pharmaceutical proteins, and providing ZFP TFs or ZFP-engineered cells which over-express a gene of interest for use in development of products for regenerative medicine or in the generation of cell lines for high-throughput compound screening. In the latter case, typically, pharmaceutical company researchers will use a cDNA encoding the drug target of interest to create these cell-based drug screens. However, if a third party holds a patent covering that cDNA, the pharmaceutical company might be prevented from using it for this purpose. Use of the ZFP-engineered cell-based system allows our partners to screen against drug targets whose gene and/or cDNA sequence is covered by competitor intellectual property, without infringing that intellectual property.

Enabling Technology Agreements for Pharmaceutical Protein Production

Protein pharmaceuticals manufactured with genetically modified cells accounted for more than $13.3 billion in annual worldwide sales in 2001. Of this total, monoclonal antibodies accounted for approximately $2.6 billion. Industry experts believe that the introduction of new protein pharmaceuticals may lead to a significant shortfall in production capacity over the next several years.

Sangamo scientists have demonstrated that ZFP-engineered mammalian cells may be used to increase the yield of systems used for pharmaceutical protein production. In January 2002, we announced an agreement with Medarex, Inc. to develop cell lines to enhance the production yields of monoclonal antibodies. Under this agreement, Medarex provided Sangamo with research funding in 2002 and 2003, and Sangamo will be entitled to milestone payments and, potentially, royalties on sales of Medarex antibodies manufactured with our ZFP TF technology. Medarex will receive a non-exclusive license to the resulting technology, and Sangamo will have the ability to utilize the technology in collaborations with other partners. Revenues attributable to collaborative research and development performed under the Medarex agreements were $600,000 for each of 2003 and 2002. There were no revenues in connection with the Medarex agreements during 2004. Related costs and expenses associated with collaborative research and development performed under the Medarex agreements were $242,000 and $273,000 in 2003 and 2002, respectively. There were no costs or expenses incurred under the Medarex agreements during 2004. During 2003 and 2002, the revenues attributable to collaborative research and development performed under the Medarex agreements comprised over 10% of total revenues earned by Sangamo.

In January 2005, we announced a research collaboration agreement with Pfizer Inc to develop enhanced cell lines for protein pharmaceutical production. Under the terms of the agreement, Pfizer is funding research at Sangamo and Sangamo will provide our proprietary ZFP technology for Pfizer to assess its feasibility for use in mammalian cell-based protein production. We will generate novel cell lines and vector systems for enhanced protein production as well as novel technology for rapid creation of new production cell lines. During the first quarter of 2005, we received $500,000 in research-related funding under the agreement with Pfizer. Revenues attributable to collaborative research and development performed under the Pfizer agreement were $42,000 during 2004. There were no costs or expenses incurred under the Pfizer agreement during 2004. As of December 31, 2004 accounts receivable from Pfizer represented 88% of our total accounts receivable balance.

In January 2005 Sangamo also announced an agreement with Amgen in which Sangamo will provide its ZFP technology to Amgen to evaluate its use in developing enhanced cell lines for protein production.

Enabling Technology Agreements for Regenerative Medicine

In September 2004, Sangamo announced that it had entered into an agreement with LifeScan, Inc., a Johnson & Johnson company. The agreement provides LifeScan with Sangamo's ZFP TFs for use in a program to develop therapeutic cell lines as a potential treatment for diabetes. In December 2004, this agreement was expanded to include additional targets important in diabetes. The agreements represented Sangamo's first collaboration in the field of regenerative medicine. During 2004, revenues attributable to collaborative research and development performed under the LifeScan agreements were $85,000. Related costs and expenses associated with research and development performed under the LifeScan agreements were $5,000 in 2004.

Plant Agriculture

Sangamo scientists and collaborators have shown that ZFP TFs can be used to regulate the expression of endogenous genes in plants with similar efficacy as has been shown in various mammalian cells and organisms. The ability to identify and subsequently regulate gene expression with engineered ZFP TFs may lead to the creation of new plants that increase crop yields; lower production costs; are more resistant to herbicides, pesticides, and plant pathogens; and permit the development of branded agricultural products with unique nutritional and processing characteristics. In addition, ZFNs can be used to facilitate the efficient and reproducible production of transgenic plants. To commercialize ZFP TFs and ZFNs in agricultural biotechnology, we intend to seek strategic relationships with corporate partners having capabilities in the research, development, and commercialization of agricultural products.

INTELLECTUAL PROPERTY AND TECHNOLOGY LICENSES

Our success and ability to compete is dependent in part on the protection of our proprietary technology and information. We rely on a combination of patent, copyright, trademark, and trade secret laws, as well as confidentiality agreements materials transfer agreements and licensing agreements, to establish and protect our proprietary rights.

We have licensed intellectual property directed to the design, selection, and use of ZFPs, ZFP TFs and ZFNs for gene regulation and modification from the Massachusetts Institute of Technology, Johnson and Johnson, The Scripps Research Institute, Johns Hopkins University, California Institute of Technology, and the University of Utah. These licenses grant us rights to make, use, and sell ZFPs and ZFP TFs under 11 families of patent filings. All of these patent families have been filed in the United States, and six have been filed internationally in selected countries. As of February 1, 2005, these patent filings have resulted in 14 issued U.S. patents and 7 granted foreign patents. We believe these licensed patents and patent applications include several of the early and important patent filings directed to design, selection, composition, and use of ZFPs, ZFP TFs, and ZFNs.

As of February 1, 2005, we had 55 families of Sangamo-owned patent filings, including 18 issued U.S. patents, 19 granted foreign patents, 69 pending U.S. patent applications and 78 pending foreign patent applications. These patent filings are directed to improvements in the design, composition, and use of ZFPs, ZFP TFs, and ZFNs. In the aggregate, we believe that our licensed patents and patent applications, as well as the issued Sangamo patents and pending Sangamo patent applications, will provide us with a substantial proprietary position in our commercial development of ZFP technology. The following tables provide information regarding our U.S. patents and the U.S. patents we have licensed:

Sangamo-Owned US Patents

Patent No.	Subject	Issue Date	Expiration Date
6,013,453	"Binding proteins for recognition of DNA"	January 11, 2000	August 17, 2015
6,453,242	"Selection of Sites for Targeting by Zinc Finger Proteins and Methods of Designing Zinc Finger Proteins to Bind to Preselected Sites"	September 17, 2002	January 12, 2019

Patent No.	Subject	Issue Date	Expiration Date
6,492,117	"Zinc Finger Proteins Capable of Binding DNA Quadruplexes"	December 10, 2002	July 12, 2020
6,503,717	"Methods of Using Randomized Libraries of Zinc Finger Proteins for the Identification of Gene Function"	January 7, 2003	December 6, 2020
6,511,808	"Methods for Designing Exogenous Regulatory Molecules"	January 28, 2003	April 27, 2021
6,534,261	"Regulation of Endogenous Gene Expression in Cells Using Zinc Finger Proteins"	March 18, 2003	January 12, 2019
6,599,692	"Functional Genomics Using Zinc Finger Proteins"	July 29, 2003	September 14, 2019
6,607,882	"Regulation of Endogenous Gene Expression in Cells Using Zinc Finger Proteins"	August 19, 2003	January 12, 2019
6,610,489	"Pharmacogenomics and Identification of Drug Targets by Reconstruction of Signal Transduction Pathways Based on Sequences of Accessible Regions."	August 26, 2003	April 27, 2021
6,689,558	"Cells for Drug Discovery"	February 10, 2004	February 8, 2021
6,706,470	"Gene Switches"	March 16, 2004	May 30, 2020
6,733,970	"Screening System for Zinc Finger Polypeptides for a Desired Binding Ability"	May 11, 2004	November 9, 2019
6,746,838	"Nucleic Acid Binding Proteins (ZFP Design Rules)"	June 8, 2004	May 26, 2018
6,777,185	"Functional Genomics Using Zinc Finger Proteins"	August 17, 2004	September 14, 2019
6,780,590	"Gene Identification"	August 24, 2004	September 14, 2019
6,785,613	"Selection of Sites for Targeting by Zinc Finger Proteins and Methods of Designing Zinc Finger Proteins to Bind to Preselected Sites"	August 31, 2004	January 12, 2019
6,794,136	"Iterative Optimization in the Design of Binding Proteins"	September 21, 2004	November 20, 2020
6,824,978	"Regulation of Endogenous Gene Expression in Cells Using Zinc Finger Proteins"	November 30, 2004	January 12, 2019

Licensed US Patents

Patent No.	Subject	Issue Date	Expiration Date
5,356,802	"Functional domains in *Flavobacterium okeanokoites* (*Fok*I) restriction endonuclease"	October 18, 1994	October 18, 2011
5,436,150	"Functional domains in Flavobacterium okeanokoites (*Fok*I) restriction endonuclease"	July 25, 1995	July 25, 2012
5,487,994	"Insertion and deletion mutants of *Fok*I restriction endonuclease"	January 30, 1996	January 30, 2013
5,789,538	"Zinc finger proteins with high affinity new DNA binding specificities"	August 4, 1998	February 3, 2015
5,792,640	"General method to clone hybrid restriction endonucleases using *lig* gene"	August 11, 1998	April 3, 2012
5,916,794	"Methods for inactivating target DNA and for detecting conformational change in a nucleic acid"	June 29, 1999	April 3, 2012

Patent No.	Subject	Issue Date	Expiration Date
5,925,523	“Interaction trap assay, reagents and uses thereof”	July 20, 1999	August 22, 2017
6,140,466	“Zinc finger protein derivatives and methods therefor”	October 31, 2000	January 18, 2014
6,200,759	“Interaction trap assay, reagents and uses thereof”	March 13, 2001	August 22, 2017
6,242,568	“Zinc finger protein derivatives and methods therefor”	June 5, 2001	June 5, 2018
6,265,196	“Methods for inactivating target DNA and for detecting conformational change in a nucleic acid”	July 24, 2001	April 3, 2012
6,410,248	“General Strategy for selecting high-affinity zinc finger proteins for diverse DNA target sites”	June 25, 2002	January 29, 2019
6,479,626	“Poly-zinc finger proteins with improved linkers.”	November 12, 2002	March 1, 2019
6,790,941	“Zinc finger protein derivatives and methods therefor”	September 14, 2004	January 18, 2014

Technology Licenses

Massachusetts Institute of Technology

The Company entered into a license agreement with the Massachusetts Institute of Technology (MIT) on May 9, 1996, as subsequently amended, whereby the Company was granted a worldwide exclusive license to technology and patents relating to the design, selection and use of ZFPs for all fields of use, including the right to sublicense. The Company pays annual license fees under the agreement and is obligated to make milestone payments upon the issuance of certain patents and upon the initiation of certain phases of clinical development. Since the inception of this agreement, the Company has made a total of $210,000 in milestone payments to MIT. Aggregate potential milestone payments under this agreement are approximately $465,000 over the term of this agreement through 2007. Additionally, if we sublicense and co-develop products using the MIT technology, we would be required to pay sublicense fees and royalties on product sales during the term of the agreement. The agreement expires upon the expiration of the last patent covered by the agreement. Based on currently issued patents and currently filed patent applications, this agreement will terminate on May 16, 2021.

The Johns Hopkins University

The Company entered into a license agreement with the Johns Hopkins University (JHU) on June 29, 1995, as subsequently amended, whereby the Company was granted a worldwide exclusive license to technology and patents relating to gene targeting technology for all fields of use, including the right to sublicense. Pursuant to the agreement, the Company pays an annual minimum royalty and would pay royalties on product sales. The Company has made a total of $37,500 in milestone payments to date and is not obligated to make any further milestone payments under the agreement. Additionally, if the Company successfully develops a product using the technology licensed to it under this agreement, the Company would be required to pay JHU royalties on product sales during the term of the agreement. The agreement expires upon the expiration of the last patent covered by the agreement. Based on currently issued patents, this agreement will terminate on January 30, 2013.

Johnson & Johnson

The Company entered into a license agreement with Johnson & Johnson (J&J) on May 9, 1996 whereby the Company was granted a worldwide exclusive license to technology and patents for the research, development and commercialization of therapeutic and diagnostic products using engineered ZFPs. Pursuant

to the agreement, the Company paid a license fee and will make future milestone payments and pay royalties on any product sales during the term of the agreement. To date, the Company has not made any milestone payments under the agreement. Aggregate potential milestone payments under this agreement are approximately $125,000. The agreement expires upon the expiration of the last patent covered by the agreement. Based on currently issued patents and currently filed patent applications, this agreement will terminate on June 5, 2018.

The Scripps Research Institute

The Company entered into a license agreement with the Scripps Research Institute (Scripps) on March 14, 2000 whereby the Company was granted a worldwide exclusive license to technology and patents for the research, development and commercialization of products and services using engineered ZFPs, excluding the use of engineered ZFPs in plant agriculture, therapeutics and diagnostics. Pursuant to the agreement, the Company must pay an annual minimum royalty of $50,000 and royalties on product sales during the term of the agreement, for any products developed under the agreement. No milestone payments are payable under the agreement. Based on currently issued patents and currently filed patent applications, the Scripps agreement will terminate on June 5, 2018.

The California Institute of Technology

The Company entered into a license agreement with the California Institute of Technology (Cal Tech) on November 1, 2003 whereby the Company was granted a worldwide exclusive license to intellectual property covering the use of chimeric nucleases to stimulate gene targeting, in all fields except research tools and diagnostics. Pursuant to the agreement, the Company has paid a license fee of 25,000 shares of unregistered Sangamo common stock, valued at $129,500, which was considered a research and development expense. No costs or expenses have been incurred under this agreement. No royalties or milestone fees are payable under this agreement. Products and services developed under this agreement relate to the use of zinc finger nucleases (ZFNs) for therapeutic gene correction in human healthcare and gene targeting in plant agriculture. The agreement expires upon the expiration of the last patent covered by the agreement. Based on currently filed patent applications, the Cal Tech agreement will terminate on September 5, 2023.

The University of Utah

The Company entered into a license agreement with the University of Utah (Utah) on September 8, 2004 whereby the Company was granted a worldwide exclusive license to technology and patents for the use of zinc finger nucleases for targeted genomic cleavage, mutagenesis and gene targeting in all fields of use except plants. Pursuant to the agreement, the Company has paid a license fee of 25,000 shares of unregistered Sangamo common stock, valued at $106,250, which was considered a research and development expense. Additionally, the Company must pay an annual minimum royalty of $20,000, is obligated to make milestone payments upon the issuance of certain patents and upon the initiation of certain phases of clinical development, and will pay royalties on any product sales during the term of the agreement. To date, the Company has not made any milestone payments under the agreement. The agreement expires upon the expiration of the last patent covered by the agreement. Based on currently filed patent applications, this agreement will terminate on January 21, 2023.

If we are successful in the development and commercialization of our products, we will be obligated by our license agreements to make milestone and royalty payments to some or all of the licensors mentioned above. We believe that total payments under these agreements over the next three years will not exceed $2.0 million. For risks associated with our intellectual property, see “Risks Related to Our Business — Because it is difficult and costly to protect our proprietary rights, and third parties have filed patent applications that are similar to ours, we cannot ensure the proprietary protection of our technologies and products.” We plan to continue to license and to internally generate intellectual property covering the design, selection, composition, and use of ZFPs; the genes encoding these proteins; and the application of ZFPs, ZFP TFs, and ZFNs in ZFP Therapeutics, Enabling Technology applications, and in plant agriculture research.

Although we have filed for patents on some aspects of our technology, we cannot provide assurances that patents will issue as a result of these pending applications or that any patent that has been or may be issued will be upheld. One of our foreign patents, which forms the basis for five European Regional Phase patents, has been opposed by a third party, and we cannot predict the outcome of these opposition proceedings. See "Risks Related to Our Business — Because it is difficult and costly to protect our proprietary rights, and third parties have filed patent applications that are similar to ours, we cannot ensure the proprietary protection of our technologies and products." Despite our efforts to protect our proprietary rights, existing patent, copyright, trademark, and trade secret laws afford only limited protection, and we cannot assure you that our intellectual property rights, if challenged, will be upheld as valid or will be adequate to protect our proprietary technology and information. In addition, the laws of some foreign countries may not protect our proprietary rights to the same extent as do the laws of the United States. Attempts may be made to copy or reverse engineer aspects of our technology or to obtain and use information that we regard as proprietary. Our patent filings may be subject to interferences. Litigation or opposition proceedings may be necessary in the future to enforce or uphold our intellectual property rights, to determine the scope of our licenses, or to determine the validity and scope of the proprietary rights of others. The defense and prosecution of intellectual property lawsuits, United States Patent and Trademark Office interference proceedings, and related legal and administrative proceedings in the United States and internationally involve complex legal and factual questions. As a result, these proceedings would be costly and time consuming to pursue and could result in diversion of financial and management resources without any assurance of success.

In the future, third parties may assert patent, copyright, trademark, and other intellectual property rights to technologies that are important to our business. Any claims asserting that our products infringe or may infringe proprietary rights of third parties, if determined adversely to us, could significantly harm our business. Any claims, with or without merit, could result in costly litigation, divert the efforts of our technical and management personnel, or require us to enter into or modify existing royalty or licensing agreements, any of which could significantly harm our business. Royalty or licensing agreements, if required, may not be available on terms acceptable to us, if at all. See "Risks Related to Our Business — Because it is difficult and costly to protect our proprietary rights, and third parties have filed patent applications that are similar to ours, we cannot ensure the proprietary protection of our technologies and products."

We have been advised that our technology can give us and our collaborators independence from third party patent claims to gene sequences. In general, under United States patent law, a patent may be obtained for any new and useful process, machine, manufacture, or composition of matter. An underlying theme of United States patent law, as related to biotechnology, is that the sequence of a gene, as it exists in the chromosome, is not new, even when newly discovered, unless it is isolated or modified from its normal chromosomal context. As a result, for over a decade, patent courts have held that, to be patentable, a DNA sequence must be purified, isolated or modified. Accordingly, U.S. patent claims to DNA sequences can cover only isolated, purified or modified nucleic acid sequences (e.g., a purified DNA fragment or a DNA sequence inserted into a vector). We have been advised that U.S. patent claims to DNA sequences do not, and cannot, cover gene sequences as they exist in their natural chromosomal environment and international patent law is consistent with U.S. patent law in this regard. Most current methods for over-expression of a gene or protein involve introduction, into a cell, of a vector containing a DNA encoding the protein to be over-expressed. Since such a vector contains isolated sequences which encode the protein, it would be covered by any patent claims to those sequences. In contrast, Sangamo's methods for over-expression utilize ZFP TFs that target endogenous genes as they exist in the chromosome. As a result, our methods do not require the use of isolated DNA sequences encoding the protein to be over-expressed and, our counsel has advised us, do not infringe patent claims to such sequences. Notwithstanding this advice, we realize that others could take a contrary position that could result in litigation. While we believe that we would prevail in any such litigation, the uncertainties involved in litigation generally make it impossible to provide assurance as to the ultimate outcome of such matters. See "Risks Related to Our Business — Because it is difficult and costly to protect our proprietary rights, and third parties have filed patent applications that are similar to ours, we cannot ensure the proprietary protection of our technologies and products."

COMPETITION

Sangamo is a leader in the research, development, and commercialization of DNA binding proteins for the regulation of gene expression and gene modification. We are aware of many companies focused on other methods for regulating gene expression and a limited number of commercial and academic groups pursuing the development of ZFP gene regulation and gene modification technology. The field of applied gene regulation is highly competitive and we expect competition to persist and intensify in the future from a number of different sources, including pharmaceutical, agricultural, and biotechnology companies; academic and research institutions; and government agencies that will seek to develop ZFPs as well as technologies that will compete with our ZFP technology platform.

In July 2001, we strengthened our competitive position by completing our acquisition of Gendaq Ltd. Gendaq scientists had also focused their research efforts on regulating genes through the engineering of ZFPs and they brought significant additional know-how and intellectual property into Sangamo. Despite our strong presence in the field of ZFP technology and intellectual property, any products that we develop with our ZFP TF technology may participate in highly competitive markets. Many of our potential competitors in these markets, either alone or with their collaborative partners, may have substantially greater financial, technical, and personnel resources than we do, and they may succeed in developing technologies and products that would render our technology obsolete or non-competitive. In addition, many of those competitors may have significantly greater experience than we do in their respective fields.

Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval, or commercializing ZFP Therapeutics or other competitive products before us. If we commence commercial product sales, we may be competing against companies with greater marketing and manufacturing capabilities, areas in which we have limited or no experience. In addition, any product candidate that we successfully develop may compete with existing products that have long histories of safe and effective use.

Although we are in the clinical development phase of operations and have no current therapeutic products or product sales, we believe the following companies, products and/or technologies may potentially be competitive with our technology or our products under development:

- Small molecules in development from both in-house drug discovery programs of pharmaceutical companies such as Pfizer, Merck and Eli Lilly, as well as from biotechnology companies with expertise and capabilities in small molecule discovery and development such as Millennium Pharmaceuticals and Exelixis.
- Monoclonal antibody companies and product candidates from certain biotechnology firms such as Genentech, Amgen, Medimmune, as well as Abgenix, Medarex, Cambridge Antibody Technology, HGSI and Protein Design Labs.
- Protein pharmaceuticals under development at pharmaceutical and biotechnology companies such as Amgen, Genentech, Johnson & Johnson, Lilly and Biogen and numerous other pharmaceutical and small biotechnology firms.
- Gene therapy companies who are developing gene-based products in clinical trials. None of these products have yet been approved. Our competitors in this category may include Cell Genesys, which has different versions of the GVAX® cancer vaccine in Phase I Phase II and Phase III clinical studies; GenVec, which is working on gene-based therapies such as BIOBYPASS® for the treatment of coronary artery disease and a gene therapy approach to AMD; and Valentis, which is completing a Phase I human clinical trial of DeltavascTM planning to conduct pivotal clinical studies of VLTS 934 for the treatment of PAD and which may be competitive with Sangamo’s program in this area.
- Antisense therapeutics and RNA interference technology, or RNAi, which are two technologies that may compete with ZFP-Therapeutics in the development of novel therapeutic products acting through the regulation of gene expression. These technologies are being developed by numerous biotechnology companies including Isis, Sirna and Alnylam.

We expect to face intense competition from other companies for collaborative arrangements with pharmaceutical, biotechnology, and agricultural companies; for establishing relationships with academic and research institutions; and for licenses to proprietary technology. These competitors, either alone or with their collaborative partners, may succeed in developing technologies or products that are more effective or less costly than ours.

Our ability to compete successfully will depend, in part, on our ability to:

- develop proprietary products;
- obtain access to gene transfer technology on commercially reasonable terms;
- develop and maintain products that reach the market first and are technologically superior to or are of lower cost than other products in the market;
- attract and retain scientific and product development personnel;
- obtain and enforce patents, licenses, or other proprietary protection for our products and technologies;
- obtain required regulatory approvals; and
- formulate, manufacture, market, and sell any product that we develop.

GOVERNMENT REGULATION

Before commencing clinical investigations in humans, we must submit to, and receive approval from, the FDA of an IND application. Our partner, Edwards Lifesciences, submitted a Phase I clinical protocol for review by the NIH RAC in the fourth quarter of 2003 and filed the first ZFP Therapeutic IND application with the FDA in February 2004. We have also filed our own IND in January 2005 for our own product candidate, SB-509, for the potential treatment of diabetic neuropathy. We have not applied for regulatory approvals with respect to any of our other technologies or products under development. We anticipate that the research, development, and commercialization of any therapeutic products developed, either alone or with our strategic partners or collaborators, will be subject to extensive regulation in the United States and other countries.

Before marketing in the United States, any therapeutic or pharmaceutical products developed by us must undergo rigorous preclinical testing and clinical trials and an extensive regulatory clearance process implemented by the FDA under the federal Food, Drug and Cosmetic Act. The FDA regulates, among other things, the development, testing, manufacture, safety, efficacy, record keeping, labeling, storage, approval, advertising, promotion, sale, and distribution of biopharmaceutical products. The regulatory review and approval process, which includes preclinical testing and clinical trials of each product candidate, is lengthy, expensive, and uncertain. Securing FDA approval requires the submission of extensive preclinical and clinical data and supporting information to the FDA for each indication to establish a product candidate’s safety and efficacy. The approval process takes many years, requires the expenditure of substantial resources, involves post-marketing surveillance, and may involve ongoing requirements for post-marketing studies.

Clinical trials are lengthy and are typically conducted in three sequential phases, but the phases may overlap or be combined. Each trial must be reviewed and approved by an independent ethics committee or institutional review board before it can begin. Phase I usually involves the initial introduction of the investigational drug into healthy volunteers or patients to evaluate certain factors, including its safety and dose tolerance. Phase II usually involves trials in a limited patient population to evaluate dosage tolerance and appropriate dosage, identify possible adverse effects and safety risks, and evaluate preliminary efficacy of the drug for specific indications. Phase III trials usually further evaluate clinical efficacy and test further for safety by using the drug in its final form in an expanded patient population. Later clinical trials may fail to support the findings of earlier trials, which would delay, limit or prevent regulatory approvals.

Outside the United States, our ability to market a product is contingent upon receiving marketing authorization from the appropriate regulatory authorities. The requirements governing the conduct of clinical trials, marketing authorization, pricing, and reimbursement vary widely from country to country. At present,

foreign marketing authorizations are applied for at a national level; although, within the European Union (EU), registration procedures are available to companies wishing to market a product in more than one EU member state. If the regulatory authority is presented with adequate evidence of safety, quality, and efficacy, they will grant a marketing authorization. This foreign regulatory approval process involves all of the risks associated with FDA clearance discussed above.

We have hired personnel with expertise in regulatory affairs to assist us in obtaining appropriate regulatory approvals as required. In 2004, we hired employees with experience in preclinical and clinical development of therapeutic programs and products. We also intend to work with our strategic partners and collaborators that have experience in regulatory affairs to assist us in obtaining regulatory approvals for collaborative products. See Risks Related to Our Business — "Our potential therapeutic products are subject to a lengthy and uncertain regulatory process, and if these potential products are not approved, we will not be able to commercialize those products" and "Regulatory approval, if granted, may be limited to specific uses or geographic areas which could limit our ability to generate revenues."

RESEARCH AND DEVELOPMENT EXPENSES

Over the past three fiscal years, research and development expenses have consisted primarily of salaries and related personnel expenses, laboratory supplies, allocated facilities costs, subcontracted research expenses, and expenses for patent prosecution, trademark registration and technology licenses. Research and development expenses were $11.0 million, $10.2 million and $12.2 million for 2004, 2003 and 2002, respectively. Research and development costs incurred in connection with activities funded by company collaborators are expensed as incurred. We believe that continued investment in research and development is critical to attaining our strategic objectives. We expect these expenses will increase significantly as we focus increasingly on development of ZFP Therapeutics. The Company is also developing zinc finger nucleases (ZFN) for therapeutic gene modification as a treatment for certain infectious diseases such as HIV infection and as a treatment and possible cure for certain monogenic diseases. Additionally, in order to develop ZFPs as commercially relevant therapeutics, we expect to expend additional resources for expertise in the manufacturing, regulatory affairs and clinical research aspects of biotherapeutic development.

EMPLOYEES

As of February 14, 2005, we had 54 full-time employees, all of which are located in Richmond, California. None of our employees is represented by a collective bargaining agreement, nor have we experienced work stoppages. We believe that our relations with our employees are good.

AVAILABLE INFORMATION

Sangamo can be found on the internet at http://www.sangamo.com and http://www.expressinglife.com. We make available free of charge, on or through our internet site, our annual, quarterly, and current reports and any amendments to those reports filed or furnished pursuant to Section 13(a) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Information contained in Sangamo's internet site is not part of this report.

RISKS RELATED TO OUR BUSINESS

We have increased the focus of our research and development programs on human therapeutics, which may increase operating expenditures and the uncertainty of our business. We are increasing the emphasis and focus of our research and development activities on ZFP Therapeutics and have fewer resources invested in our Enabling Technology programs. In the short term, this change in resource allocation may reduce our revenues and increase operating expenditures due to larger financial outlays to fund preclinical studies, manufacturing, and clinical research. The transition will also increase the visibility of our lead therapeutic programs and the potential impact on the stock price of news releases relating to these programs.

We are conducting proprietary research to discover ZFP Therapeutic product candidates. These programs increase our financial risk of product failure, may significantly increase our research expenditures, and may

involve conflicts with our collaborators and strategic partners. Our proprietary research programs consist of research which is funded solely by the Company and where the Company retains exclusive rights to therapeutic products generated by the research. This is in contrast to certain of our research programs that may be funded by corporate partners and in which we may share rights to any resulting products. We have conducted proprietary research since inception, however, in the past year, our strategy has shifted toward placing greater emphasis on proprietary research and therapeutic development and we expect this trend will continue in 2005 as we initiate our first human clinical trial. Conducting proprietary research programs may not generate corresponding revenue and may create conflicts with our collaborators or strategic partners. The implementation of this strategy will involve substantially greater business risks, the expenditure of significantly greater funds than our historic research activities and will require substantial commitments of time from our management and staff.

In addition, disagreements with our collaborators or strategic partners could develop over rights to our intellectual property with respect to our proprietary research activities. Any conflict with our collaborators or strategic partners could reduce our ability to enter into future collaboration or strategic partnering agreements and negatively impact our relationship with existing collaborators and strategic partners, which could reduce our revenue and delay or terminate our product development.

Our partner, Edwards Lifesciences, has initiated a Phase I clinical testing in our lead ZFP Therapeutic program, and ZFP Therapeutics have never before been tested in humans. If our lead ZFP Therapeutic fails its initial safety study, it could reduce our ability to attract new investors and corporate partners. Edwards Lifesciences filed an investigational new drug (IND) application with the U.S. Food and Drug Administration (FDA) on February 10, 2004 and initiated a phase I clinical trial in humans in August, 2004. The Phase I study of our lead therapeutic will be a highly visible test of the Company's ZFP Therapeutic approach. Since we have increased our focus on ZFP Therapeutic research and development, investors will increasingly assess the value of the Company's technology based on the continued progress of ZFP Therapeutic products into and through clinical trials. If the initial safety study of our lead therapeutic was halted due to safety concerns, this would negatively affect the value of the Company's stock.

Our collaborators may control aspects of our clinical trials, which could result in delays and other obstacles in the commercialization of our proposed products. For some programs we are dependent on third party collaborators to design and conduct our clinical trials. As a result, we may not be able to conduct these programs in the manner or on the time schedule we currently contemplate. In addition, if any of these collaborative partners withdraw support for our programs or proposed products or otherwise impair their development, our business could be negatively affected.

We have limited experience in conducting clinical trials, and we may encounter unanticipated toxicity or adverse events or fail to demonstrate the efficacy or safety that cause us to delay, suspend or terminate the development of our ZFP Therapeutics. Our ZFP Therapeutics may fail to show the desired safety and efficacy in initial clinical trials. Even if we successfully complete Phase I trials, the FDA will require additional Phase II and Phase III clinical testing which involves significantly greater resources, commitments and expertise that may require us to enter into a collaborative relationship with a pharmaceutical company that would assume responsibility for late-stage development and commercialization.

Our potential therapeutic products are subject to a lengthy and uncertain regulatory process, and if these potential products are not approved, we will not be able to commercialize those products. The FDA must approve any human therapeutic products before they can be marketed in the United States. The process for receiving regulatory approval is long and uncertain, and a potential product may not withstand the rigors of testing under the regulatory approval processes.

Before commencing clinical trials in humans, we or our commercial partner must submit an Investigational New Drug (IND) application to the FDA. The FDA has 30 days to comment on the IND. If the FDA does not comment on the IND, we or our commercial partner may begin clinical trials.

Clinical trials are subject to oversight by institutional review boards and the FDA. In addition, our proposed clinical studies will require review from the Recombinant DNA Advisory Committee, or RAC,

which is the advisory board to the National Institutes of Health, or NIH, focusing on clinical trials involving gene transfer. We will typically submit a proposed clinical protocol and other product-related information to the RAC three to six months prior to the expected IND filing date.

Clinical trials:

- must be conducted in conformance with the FDA's good clinical practices and other applicable regulations;
- must meet requirements for institutional review board oversight;
- must follow Institutional Biosafety Committee (IBC) and NIH RAC guidelines;
- must meet requirements for informed consent;
- are subject to continuing FDA oversight;
- may require large numbers of test subjects; and
- may be suspended by our commercial partner, the FDA, or us at any time if it is believed that the subjects participating in these trials are being exposed to unacceptable health risks or if the FDA finds deficiencies in the IND or the conduct of these trials.

Clinical trials are lengthy and are typically conducted in three sequential phases, but the phases may overlap or be combined. Each trial must be reviewed and approved by an independent ethics committee or institutional review board before it can begin. Phase I usually involves the initial introduction of the investigational drug into healthy volunteers or patients to evaluate certain factors, including its safety, dosage tolerance and, if possible, to gain an early indication of its effectiveness. Phase II usually involves trials in a limited patient population to evaluate dosage tolerance and appropriate dosage, identify possible adverse effects and safety risks, and evaluate preliminarily the efficacy of the drug for specific indications. Phase III trials usually further evaluate clinical efficacy and test further for safety by using the drug in its final form in an expanded patient population. Later clinical trials may fail to support the findings of earlier trials, which would delay, limit or prevent regulatory approvals.

While we have stated our intention to file IND applications during the next several years, this is only a statement of intent, and we may not be able to do so because the associated product candidates may not meet the necessary preclinical requirements. In addition, there can be no assurance that, once filed, an IND application will result in the actual initiation of clinical trials.

We may not be able to find acceptable patients or may experience delays in enrolling patients for our clinical trials. The FDA or we may suspend our clinical trials at any time if either believes that we are exposing the subjects participating in these trials to unacceptable health risks. The FDA or institutional review boards and/or institutional biosafety committees at the medical institutions and healthcare facilities where we sponsor clinical trials may suspend any trial indefinitely if they find deficiencies in the conduct of these trials. The FDA and institutional review boards may also require large numbers of patients, and the FDA may require that we repeat a clinical trial.

The results of early Phase I trials are based on a small number of patients over a short period of time, and our success may not be indicative of results in a large number of patients or of long-term efficacy. The results in early phases of clinical testing are based upon limited numbers of patients and a limited follow-up period. For example, the results from the Phase I clinical trial of our ZFP Therapeutic, SB-509 product, are expected to be available in the first half of 2006. The primary end point of the trial is clinical and laboratory safety, however we expect to be able to collect some preliminary efficacy data. Typically, our Phase I clinical trials for indications of safety enroll less than 50 patients. We anticipate that our Phase II clinical trials for efficacy would typically enroll approximately 100 patients. Actual results with more data points may not confirm favorable results from our earlier stage trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late stage clinical trials even after achieving promising results in earlier stage clinical trials. In addition, we do not yet know if early results will have a lasting effect. If a larger population of patients does not experience positive results, or if these results do not

have a lasting effect, our products may not receive approval from the FDA. Failure to demonstrate the safety and effectiveness of our gene based products in larger patient populations could have a material adverse effect on our business that would cause our stock price to decline significantly.

We cannot predict whether or when we will obtain regulatory approval to commercialize our product candidates, therefore we cannot predict the timing of any future revenue from these product candidates. We cannot commercialize any of our product candidates to generate revenue until the appropriate regulatory authorities have reviewed and approved the applications for the product candidates. We cannot assure you that the regulatory agencies will complete their review processes in a timely manner or that we will obtain regulatory approval for any product candidate that we or our collaborators develop. Satisfaction of regulatory requirements typically takes many years, is dependent upon the type, complexity and novelty of the product and requires the expenditure of substantial resources. Regulatory approval processes outside the United States include all of the risks associated with the FDA approval process. In addition, we may experience delays or rejections based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review.

Our gene regulation and gene modification technology is relatively new, and if we are unable to use this technology in all our intended applications, it would limit our revenue opportunities. Our technology involves a relatively new approach to gene regulation and gene modification. Although we have generated ZFP TFs for hundreds of gene sequences, we have not created ZFP TFs for all gene sequences and may not be able do so, which could limit the usefulness of our technology. In addition, while we have demonstrated the function of engineered ZFP TFs in mammalian cell culture, yeast, insects, plants, and animals, we have not yet done so in humans, and the failure to do so could restrict our ability to develop commercially viable products. If we, and our collaborators or strategic partners, are unable to extend our results to new commercially important genes, experimental animal models, and human clinical studies, we may be unable to use our technology in all its intended applications. Also, delivery of ZFP TFs and ZFNs into cells and organisms, including humans, in these and other environments is limited by a number of technical hurdles, which we may be unable to surmount. This is a particular challenge for therapeutic applications of our technology that will require the use of gene transfer systems that may not be effective for the delivery of our ZFP TFs or ZFNs in a particular therapeutic application.

The expected value and utility of our ZFP TFs and ZFNs is in part based on our belief that the targeted or specific regulation of gene expression and targeted gene modification may enable us to develop a new therapeutic approach as well as to help scientists better understand the role of human, animal, and other genes in disease and to aid their efforts in drug discovery and development. We also believe that the regulation of gene expression and targeted gene insertion will have utility in agricultural applications. There is only a limited understanding of the role of specific genes in all these fields. Life sciences companies have developed or commercialized only a few products in any of these fields based on results from genomic research or the ability to regulate gene expression. We, our collaborators, or our strategic partners may not be able to use our technology to identify and validate drug targets or to develop commercial products in the intended markets.

We are currently engaged in the research and development of a new application of our technology platform: ZFP-mediated gene modification using ZFNs to effect either gene correction or gene disruption. Using this technique, Sangamo scientists have engineered gene-specific ZFPs to cut DNA at a specific site within a target gene, and to then to either correct the adjacent sequences with newly synthesized DNA copied from an introduced DNA template, gene correction, or to rejoin the two ends of the break which frequently results in the disruption of the gene's function. In so doing, we are attempting to "correct" an abnormal or disease-related mutation or DNA sequence or to disrupt a gene that is involved in disease pathology. ZFP-mediated gene modification is at an early stage of development. Our scientists have shown ZFP-mediated gene modification to work in isolated cells; however, a significant amount of additional research will be needed before this technique can be evaluated in animals or plants and subsequently tested for applications in human healthcare and plant agriculture.

We may be unable to license gene transfer technologies that we may need to commercialize our ZFP TF technology. In order to regulate a gene in a cell, the ZFP TF or ZFN must be efficiently delivered to the cell.

We have licensed certain gene transfer technologies for use with our Enabling Technologies, which are ZFP TFs and ZFNs used in pharmaceutical discovery research and protein production. We are evaluating these systems and other technologies which may need to be used in the delivery of ZFP TFs or ZFNs into cells for *in vitro* and *in vivo* applications, including ZFP Therapeutics. However, we may not be able to license the gene transfer technologies required to develop and commercialize our ZFP Therapeutics. We have not developed our own gene transfer technologies, and we rely on our ability to enter into license agreements to provide us with rights to the necessary gene transfer technology. The inability to obtain a license to use gene transfer technologies with entities which own such technology on reasonable commercial terms, if at all, could delay or prevent the preclinical evaluation, clinical testing, and/or commercialization of our therapeutic product candidates.

We do not currently have the infrastructure or capability to manufacture therapeutic products on a commercial scale. In order for us to commercialize these products directly, we would need to develop, or obtain through outsourcing arrangements, the capability to execute all of these functions. If we are unable to develop or otherwise obtain the requisite preclinical, clinical, regulatory, manufacturing, marketing, and sales capabilities, we would be unable to directly commercialize our therapeutics products which would limit our future growth.

Even if our technology proves to be effective, it still may not lead to commercially viable products. Even if our collaborators or strategic partners are successful in using our ZFP technology in drug discovery, protein production, therapeutic development, or plant agriculture, they may not be able to commercialize the resulting products or may decide to use other methods competitive with our technology. To date, no company has received marketing approval or has developed or commercialized any therapeutic or agricultural products based on our technology. The failure of our technology to provide safe, effective, useful, or commercially viable approaches to the discovery and development of these products would significantly limit our business and future growth and would adversely affect our value.

Even if our product development efforts are successful and even if the requisite regulatory approvals are obtained, our ZFP Therapeutics may not gain market acceptance among physicians, patients, healthcare payers and the medical community. A number of additional factors may limit the market acceptance of products including the following:

- rate of adoption by healthcare practitioners;
- rate of a product’s acceptance by the target population;
- timing of market entry relative to competitive products;
- availability of alternative therapies;
- price of our product relative to alternative therapies;
- availability of third-party reimbursement;
- extent of marketing efforts by us and third-party distributors or agents retained by us; and
- side effects or unfavorable publicity concerning our products or similar products.

Adverse events in the field of gene therapy may negatively impact regulatory approval or public perception of our potential products. Our potential therapeutic products are delivered to patients as gene-based drugs, or gene therapy. The clinical and commercial success of our potential products will depend in part on public acceptance of the use of gene therapy for the prevention or treatment of human diseases. Public attitudes may be influenced by claims that gene therapy is unsafe, and, consequently, our products may not gain the acceptance of the public or the medical community. Negative public reaction to gene therapy in general could result in greater government regulation and stricter labeling requirements of gene therapy products, including any of our products, and could cause a decrease in the demand for any products we may develop.

Our stock price is also influenced by public perception. Reports of serious adverse events in a retroviral gene transfer trial for infants with X-linked severe combined immunodeficiency (X-linked SCID) in France

and subsequent FDA actions putting related trials on hold in the United States had a significant negative impact on the public perception and stock price of certain companies involved in gene therapy. Stock prices of these companies declined whether or not the specific company was involved with retroviral gene transfer for the treatment of infants with SCID, or whether the specific company's clinical trials were placed on hold in connection with these events.

Other potential adverse events in the field of gene therapy may occur in the future that could result in greater governmental regulation of our potential products and potential regulatory delays relating to the testing or approval of our potential products.

We are at the development phase of operations and may not succeed or become profitable. We began operations in 1995 and are in the early phases of ZFP Therapeutic product development. We have incurred significant losses and our net losses for the past three fiscal years ended 2004, 2003 and 2002 were $13.8 million, $10.4 million and $29.8 million, respectively. To date, our revenues have been generated from Enabling Technology agreements, strategic partners, and federal government research grants. In 2004, we have placed more emphasis on higher-value therapeutic product development and related strategic partnerships. This shift in emphasis has the potential to increase the return on investment to our stockholders by allocating capital resources to higher value, therapeutic product development activities. At the same time, it increases our financial risk by increasing expenses associated with product development. In addition, the preclinical or clinical failure of any single product may have a significant effect on the actual or perceived value of our shares. Our business is subject to all of the risks inherent in the development of a new technology, which include the need to:

- attract and retain qualified scientific and technical staff and management, particularly scientific staff with expertise to develop our early-stage technology into therapeutic products;
- obtain sufficient capital to support the expense of developing our technology platform and developing, testing, and commercializing products;
- develop a market for our products;
- successfully transition from a company with a research focus to a company capable of supporting commercial activities; and
- attract and enter into research collaborations with research and academic institutions and scientists.

Commercialization of our technologies will depend, in part, on strategic partnering with other companies. If we are not able to find strategic partners in the future or our strategic partners do not diligently pursue product development efforts, we may not be able to develop our technologies or products, which could slow our growth and decrease our value. We expect to rely, to some extent, on our strategic partners to provide funding in support of our research and to perform independent research and preclinical and clinical testing. Our technology is broad based, and we do not currently possess the resources necessary to fully develop and commercialize potential products that may result from our technologies or the resources or capabilities to complete the lengthy marketing approval processes that may be required for the products. Therefore, we plan to rely on strategic partnerships to help us develop and commercialize ZFP Therapeutic products. If those partners are unable or unwilling to advance our programs, or if they do not diligently pursue product approval, this may slow our progress and defer our revenues. Our partners may sublicense or abandon development programs or we may have disagreements with our partners, which would cause associated product development to slow or cease. There can be no assurance that we will be able to establish additional strategic collaborations for ZFP Therapeutic product development. We may require significant time to secure additional collaborations or strategic partners because we need to effectively market the benefits of our technology to these future collaborators and strategic partners, which use the time and efforts of research and development personnel and our management. Further, each collaboration or strategic partnering arrangement will involve the negotiation of terms that may be unique to each collaborator or strategic partner. These business development efforts may not result in a collaboration or strategic partnership.

The loss of our current or any future strategic partnering agreements would not only delay or terminate the potential development or commercialization of products we may derive from our technologies, but it may

also delay or terminate our ability to test ZFP TFs for specific genes. If any strategic partner fails to conduct the collaborative activities successfully and in a timely manner, the preclinical or clinical development or commercialization of the affected product candidates or research programs could be delayed or terminated.

Our existing strategic partnering agreements are based on the achievement of milestones. Under the strategic partnering agreements, we expect to receive revenue for the research and development of a ZFP Therapeutic product and based on achievement of specific milestones. Achieving these milestones will depend, in part, on the efforts of our strategic partner as well as our own. In contrast, our historic Enabling Technology agreements only pay us to supply ZFP TFs for the collaborator's independent use, rather than for future results of the collaborator's efforts. If we, or any strategic partner, fail to meet specific milestones, then the strategic partnership may be terminated, which could decrease our revenues.

If our competitors develop, acquire, or market technologies or products that are more effective than ours, this would reduce or eliminate our commercial opportunity. Any products that we or our collaborators or strategic partners develop by using our ZFP technology platform will enter into highly competitive markets. Even if we are able to generate ZFP Therapeutics that are safe and effective for their intended use, competing technologies may prove to be more effective or less expensive, which, to the extent these competing technologies achieve market acceptance, will limit our revenue opportunities. In some cases, competing technologies have proven to be satisfactorily effective and less expensive, as has been the case with technologies competitive with our Enabling Technology®. The effectiveness of these competing products has reduced the revenues generated by our Enabling Technology. Competing technologies may include other methods of regulating gene expression or modifying genes. ZFP TFs and ZFNs have broad application in the life sciences and compete with a broad array of new technologies and approaches being applied to genetic research by many companies. Competing proprietary technologies with our product development focus include:

- For ZFP Therapeutics:
  - small molecule drugs
  - monoclonal antibodies
  - recombinant proteins
  - antisense
  - siRNA approaches
- For our Enabling Technology Applications:
  - For target validation: antisense, siRNA
  - For protein production: gene amplification, meganucleases, insulator technology
  - For high throughput screening: cDNA, naturally occurring cell lines, gene amplification
- In addition to possessing competing technologies, our competitors include biotechnology companies with:
  - substantially greater capital resources than ours;
  - larger research and development staffs and facilities than ours;
  - greater experience in product development and in obtaining regulatory approvals and patent protection; and
- These organizations also compete with us to:
  - attract qualified personnel;
  - attract parties for acquisitions, joint ventures or other collaborations; and
  - license the proprietary technologies of academic and research institutions that are competitive with our technology, which may preclude us from pursuing similar opportunities.

Accordingly, our competitors may succeed in obtaining patent protection or commercializing products before us. In addition, any products that we develop may compete with existing products or services that are well established in the marketplace.

Our collaborators or strategic partners may decide to adopt alternative technologies or may be unable to develop commercially viable products with our technology, which would negatively impact our revenues and our strategy to develop these products. Our collaborators or strategic partners may adopt alternative technologies, which could decrease the marketability of ZFP technology. Additionally, because many of our collaborators or strategic partners are likely to be working on more than one development project, they could choose to shift their resources to projects other than those they are working on with us. If they do so, that would delay our ability to test our technology and would delay or terminate the development of potential products based on our ZFP technology. Further, our collaborators and strategic partners may elect not to develop products arising out of our collaborative and strategic partnering arrangements or to devote sufficient resources to the development, manufacturing, marketing, or sale of these products. If any of these events occur, we may not be able to develop our technologies or commercialize our products.

We anticipate continuing to incur operating losses for the next several years. If material losses continue for a significant period, we may be unable to continue our operations. We have generated operating losses since we began operations in 1995. The extent of our future losses and the timing of profitability are uncertain, and we expect to incur losses for the foreseeable future. We have been engaged in developing our ZFP TF technology since inception, which has and will continue to require significant research and development expenditures. To date, we have generated our revenues from Universal GeneTools® collaboration agreements, strategic partnering agreements, and federal government research grants. As of December 31, 2004, we had an accumulated deficit of approximately $97.1 million. We expect to incur losses for the foreseeable future. These losses will increase as we expand and extend our research and development activities into human therapeutic product development. If the time required to generate significant product revenues and achieve profitability is longer than we currently anticipate, we may not be able to sustain our operations.

We may be unable to raise additional capital, which would harm our ability to develop our technology and products. We have incurred significant operating losses and negative operating cash flows since inception and have not achieved profitability. We expect capital outlays and operating expenditures to increase over the next several years as we expand our infrastructure and research and ZFP Therapeutic product development activities. While we believe our financial resources will be adequate to sustain our current operations at least through 2006, we may seek additional sources of capital through equity or debt financing. In addition, as we focus our efforts on proprietary human therapeutics, we will need to seek FDA approval of potential products, a process that could cost in excess of $100 million per product. We cannot be certain that we will be able to obtain financing on terms acceptable to us, or at all. If adequate funds are not available, our business and our ability to develop our technology and ZFP Therapeutic products would be harmed.

Our stock price has been volatile and may continue to be volatile, which could result in substantial losses for investors. During the past two years, our common stock price has fluctuated significantly, ranging from a low of $3.00 to a high of $8.02 during the year ended December 31, 2004, and a low of $2.60 to a high of $5.50 during the year ended December 31, 2003. Volatility in our common stock could cause stockholders to incur substantial losses. An active public market for our common stock may not be sustained, and the market price of our common stock may continue to be highly volatile. The market price of our common stock has fluctuated significantly in response to the following factors, some of which are beyond our control:

- changes in market valuations of similar companies;
- deviations in our results of operations from the guidance given by us or estimates of securities analysts;
- announcements by us or our competitors of new or enhanced products, technologies or services or significant contracts, acquisitions, strategic relationships, joint ventures or capital commitments;
- regulatory developments;
- additions or departures of key personnel;
- announcements by us or our partners providing updates on the progress or development status of ZFP Therapeutics;

- future sales of our common stock or other securities by the company, management or directors, liquidation of institutional funds that comprised large holdings of Sangamo stock; and
- decreases in our cash balances.

Our common stock is thinly traded, which means large transactions in our common stock may be difficult to conduct in a short time frame. We have a low volume of daily trades in our common stock on the Nasdaq National Market. For example, the average daily trading volume in our common stock on the Nasdaq National Market over the ten-day trading period prior to February 1, 2005 was less than 65,000 shares per day. Any large transactions in our common stock may be difficult to conduct and may cause significant fluctuations in the price of our common stock.

Failure to attract, retain, and motivate skilled personnel and cultivate key academic collaborations will delay our product development programs and our research and development efforts. We are a small company with 54 full-time employees as of February 14, 2005, and our success depends on our continued ability to attract, retain, and motivate highly qualified management and scientific personnel and our ability to develop and maintain important relationships with leading research and academic institutions and scientists. Competition for personnel and academic and other research collaborations is intense. The success of our technology development programs depends on our ability to attract and retain highly trained personnel and we have experienced a rate of employee turnover that we believe is typical of emerging biotechnology companies. If we lose the services of personnel with the necessary skills, it could significantly impede the achievement of our research and development objectives. We are not presently aware of any plans of specific employees to retire or otherwise leave the company. If we fail to negotiate additional acceptable collaborations with academic and other research institutions and scientists, or if our existing collaborations are unsuccessful, our ZFP Therapeutic development programs may be delayed or may not succeed.

If conflicts arise between us and our collaborators, strategic partners, scientific advisors, or directors, these parties may act in their self-interest, which may limit our ability to implement our strategies. If conflicts arise between our corporate or academic collaborators, strategic partners, or scientific advisors or directors and us, the other party may act in its self-interest, which may limit our ability to implement our strategies. Some of our academic collaborators and strategic partners are conducting multiple product development efforts within each area that is the subject of the collaboration with us. Our collaborators or strategic partners, however, may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by the collaborators or strategic partners or to which the collaborators or strategic partners have rights, may result in the withdrawal of partner support for our product candidates.

Some of our collaborators or strategic partners could also become competitors in the future. Our collaborators or strategic partners could develop competing products, preclude us from entering into collaborations with their competitors, fail to obtain timely regulatory approvals, terminate their agreements with us prematurely, or fail to devote sufficient resources to the development and commercialization of products. Any of these developments could harm our product development efforts.

Because it is difficult and costly to protect our proprietary rights, and third parties have filed patent applications that are similar to ours, we cannot ensure the proprietary protection of our technologies and products. Our commercial success will depend in part on obtaining patent protection of our technology and successfully defending any of our patents which may be challenged. The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and can involve complex legal and factual questions. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date. Accordingly, we cannot predict the breadth of claims allowed in patents we own or license.

We are a party to various license agreements that give us rights under specified patents and patent applications. Our current licenses, as our future licenses frequently will, contain performance obligations. If we fail to meet those obligations, the licenses could be terminated. If we are unable to continue to license these technologies on commercially reasonable terms, or at all, we may be forced to delay or terminate our product development and research activities.

With respect to our present and any future sublicenses, since our rights derive from those granted to our sublicensor, we are subject to the risk that our sublicensor may fail to perform its obligations under the master license or fail to inform us of useful improvements in, or additions to, the underlying intellectual property owned by the original licensor.

We are unable to exercise the same degree of control over intellectual property that we license from third parties as we exercise over our internally developed intellectual property. We generally do not control the prosecution of patent applications that we license from third parties; therefore, the patent applications may not be prosecuted in a timely manner.

The degree of future protection for our proprietary rights is uncertain, and we cannot ensure that:

- we or our licensors were the first to make the inventions covered by each of our pending patent applications;
- we or our licensors were the first to file patent applications for these inventions;
- the patents of others will not have an adverse effect on our ability to do business;
- others will not independently develop similar or alternative technologies or reverse engineer any of our products, processes or technologies;
- any of our pending patent applications will result in issued patents;
- any patents issued or licensed to us or our collaborators or strategic partners will provide a basis for commercially viable products or will provide us with any competitive advantages;
- any patents issued or licensed to us will not be challenged and invalidated by third parties; or
- we will develop additional products, processes or technologies that are patentable.

Others have filed and in the future are likely to file patent applications that are similar to ours. We are aware that there are academic groups and other companies that are attempting to develop technology that is based on the use of zinc finger and other DNA binding proteins, and that these groups and companies have filed patent applications. Several patents have been issued, although we have no current plans to use the associated inventions. If these or other patents issue, it is possible that the holder of any patent or patents granted on these applications may bring an infringement action against our collaborators, strategic partners, or us claiming damages and seeking to enjoin commercial activities relating to the affected products and processes. The costs of litigating the claim could be substantial. Moreover, we cannot predict whether we, our collaborators, or strategic partners would prevail in any actions. In addition, if the relevant patent claims were upheld as valid and enforceable and our products or processes were found to infringe the patent or patents, we could be prevented from making, using, or selling the relevant product or process unless we could obtain a license or were able to design around the patent claims. We can give no assurance that such a license would be available on commercially reasonable terms, or at all, or that we would be able to successfully design around the relevant patent claims. There may be significant litigation in the genomics industry regarding patent and other intellectual property rights, which could subject us to litigation. If we become involved in litigation, it could consume a substantial portion of our managerial and financial resources.

We cannot guarantee that third parties will not challenge our intellectual property. One of our licensed patents, European Patent No. 0 682 699, entitled “Functional Domains in *Flavobacterium okeanokoites* Restriction Endonuclease” was granted on May 7, 2003 and forms the basis of Regional Phase patents in France, Germany, Great Britain, Ireland and Switzerland. The granted claims of the patent cover technologies used in our programs in targeted recombination and gene correction. On February 6, 2004, a Notice of Opposition to the European Patent was filed on behalf of Cellectis, a French company. We cannot predict the outcome of these Opposition proceedings. If the claims of this European patent were to be invalidated, it would not affect our ability to practice our targeted recombination and gene correction programs in Europe. It would, however, limit our ability to exclude potential competitors in the field of targeted recombination and gene correction in Europe.

Moreover, we also hold licenses to six US patents to the technology covered by the opposed European patent, and hold licenses to related applications pending in Canada and Japan. Accordingly, any effects of the opposition, up to and including invalidation of the European patent, would be restricted to Europe and would have little, if any, material adverse effect on our business.

We rely on trade secrets to protect technology where we believe patent protection is not appropriate or obtainable. Trade secrets, however, are difficult to protect. While we require employees, academic collaborators, and consultants to enter into confidentiality agreements, we may not be able to adequately protect our trade secrets or other proprietary information or enforce these confidentiality agreements.

Our collaborators, strategic partners, and scientific advisors have rights to publish data and information in which we may have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations and strategic partnerships, then we may not be able to receive patent protection or protect our proprietary information.

Regulatory approval, if granted, may be limited to specific uses or geographic areas, which could limit our ability to generate revenues. Regulatory approval will be limited to the indicated use for which we can market a product. Further, once regulatory approval for a product is obtained, the product and its manufacturer are subject to continual review. Discovery of previously unknown problems with a product or manufacturer may result in restrictions on the product, manufacturer, and manufacturing facility, including withdrawal of the product from the market. In Japan and Europe, regulatory agencies also set or approve prices.

Even if regulatory clearance of a product is granted, this clearance is limited to those specific states and conditions for which the product is useful, as demonstrated through clinical trials. We cannot ensure that any ZFP Therapeutic product developed by us, alone or with others, will prove to be safe and effective in clinical trials and will meet all of the applicable regulatory requirements needed to receive marketing clearance in a given country.

Outside the United States, our ability to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities, so we cannot predict whether or when we would be permitted to commercialize our product. These foreign regulatory approval processes include all of the risks associated with FDA clearance described above.

Our collaborations with outside scientists may be subject to change, which could limit our access to their expertise. We work with scientific advisors and collaborators at academic research institutions. These scientists are not our employees and may have other commitments that would limit their availability to us. Although our scientific advisors generally agree not to do competing work, if a conflict of interest between their work for us and their work for another entity arises, we may lose their services. Although our scientific advisors and academic collaborators sign agreements not to disclose our confidential information, it is possible that some of our valuable proprietary knowledge may become publicly known through them.

Laws or public sentiment may limit the production of genetically modified agricultural products in the future, and these laws could reduce our ability to sell these products. Genetically modified products are currently subject to public debate and heightened regulatory scrutiny, either of which could prevent or delay production of agricultural products. We may develop genetically modified agricultural products for ourselves or with our strategic partners. The field-testing, production, and marketing of genetically modified plants and plant products are subject to federal, state, local, and foreign governmental regulation. Regulatory agencies administering existing or future regulations or legislation may not allow production and marketing of our genetically modified products in a timely manner or under technically or commercially feasible conditions. In addition, regulatory action or private litigation could result in expenses, delays, or other impediments to our product development programs or the commercialization of resulting products.

The FDA currently applies the same regulatory standards to foods developed through genetic engineering as those applied to foods developed through traditional plant breeding. Genetically engineered food products, however, will be subject to pre-market review if these products raise safety questions or are deemed to be food

additives. Governmental authorities could also, for social or other purposes, limit the use of genetically modified products created with our gene regulation technology.

Even if we are able to obtain regulatory approval for genetically modified products, our success will also depend on public acceptance of the use of genetically modified products including drugs, plants, and plant products. Claims that genetically modified products are unsafe for consumption or pose a danger to the environment may influence public attitudes. Our genetically modified products may not gain public acceptance. The subject of genetically modified organisms has received negative publicity in the United States and particularly in Europe, and such publicity has aroused public debate. The adverse publicity in Europe could lead to greater regulation and trade restrictions on imports of genetically altered products. Similar adverse public reaction in the United States to genetic research and its resulting products could result in greater domestic regulation and could decrease the demand for our technology and products.

If we use biological and hazardous materials in a manner that causes injury or violates laws, we may be liable for damages. Our research and development activities involve the controlled use of potentially harmful biological materials as well as hazardous materials, chemicals, and various radioactive compounds typically employed in molecular and cellular biology. We routinely use cells in culture and gene delivery vectors, and we employ small amounts of radioisotopes in trace experiments. Although we maintain up-to-date licensing and training programs, we cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling, or disposal of these materials. In the event of contamination or injury, we could be held liable for damages that result, and any liability could exceed our resources. We currently carry insurance covering claims arising from our use of these materials. However, if we are unable to maintain our insurance coverage at a reasonable cost and with adequate coverage, our insurance may not cover any liability that may arise. We are subject to federal, state, and local laws and regulations governing the use, storage, handling, and disposal of these materials and specified waste products. To date, we have not experienced significant costs in complying with regulations regarding the use of these materials.

Anti-takeover provisions in our certificate of incorporation and Delaware law could make an acquisition of the Company more difficult and could prevent attempts by our stockholders to remove or replace current management. Anti-takeover provisions of Delaware law, our certificate of incorporation and our bylaws and may discourage, delay or prevent a change in control of our company, even if a change in control would be beneficial to our stockholders. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. In particular, under our certificate of incorporation our board of directors may issue up to 5,000,000 shares of preferred stock with rights and privileges that might be senior to our common stock, without the consent of the holders of the common stock. Moreover, without any further vote or action on the part of the stockholders, the board of directors would have the authority to determine the price, rights, preferences, privileges, and restrictions of the preferred stock. This preferred stock, if it is ever issued, may have preference over, and harm the rights of, the holders of common stock. Although the issuance of this preferred stock would provide us with flexibility in connection with possible acquisitions and other corporate purposes, this issuance may make it more difficult for a third party to acquire a majority of our outstanding voting stock. Similarly, our authorized but unissued common stock is available for future issuance without stockholder approval.

In addition, our certificate of incorporation:

- states that stockholders may not act by written consent but only at a stockholders' meeting;
- establishes advance notice requirements for nominations for election to the board of directors or proposing matters that can be acted upon at stockholders' meetings; and
- limits who may call a special meeting of stockholders.

We are also subject to Section 203 of the Delaware General Corporation Law, which provides, subject to certain exceptions, that if a person acquires 15% of our voting stock, the person is an "interested stockholder" and may not engage in "business combinations" with us for a period of three years from the time the person acquired 15% or more or our voting stock.

Insiders have substantial control over Sangamo and could delay or prevent a change in corporate control. The interest of management could conflict with the interest of our other stockholders. Our executive officers and directors beneficially own, in the aggregate, approximately 29% of our outstanding common stock. As a result, these stockholders, if they choose to act together, will be able to have a material impact on all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This could have the effect of delaying or preventing a change of control of Sangamo, which in turn could reduce the market price of our stock.

Item 2. ***Properties***

We currently lease approximately 22,000 square feet of research and office space located at 501 Canal Boulevard in Richmond, California. The lease expires in August of 2014. We believe the facilities we currently lease are sufficient for the foreseeable future.

Item 3. ***Legal Proceedings***

We are not a party to any material litigation.

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

Not applicable.

PART II

Item 5. ***Market for the Registrant's Common Stock, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Our common stock has traded on the Nasdaq National Market under the symbol "SGMO" since our initial public offering on April 6, 2000.

Information regarding Sangamo's equity compensation plans is incorporated by reference to Item 12 of this Form 10-K, which incorporates by reference the information set forth in the section entitled "Equity Compensation Plans" in Sangamo's proxy statement to be filed pursuant to Regulation 14A within 120 days of Sangamo's fiscal year end.

The high and low closing prices of our common stock for each quarterly period during the last two fiscal years as reported by the Nasdaq National Market were as follows:

Common Stock

	Price	
	High	**Low**
Year ended December 31, 2003		
First Quarter	$ 4.99	$ 2.60
Second Quarter	$ 5.35	$ 2.45
Third Quarter	$ 4.09	$ 2.60
Fourth Quarter	$ 5.50	$ 4.05
Year ended December 31, 2004		
First Quarter	$ 8.02	$ 5.28
Second Quarter	$ 6.87	$ 5.60
Third Quarter	$ 5.85	$ 3.00
Fourth Quarter	$ 6.00	$ 3.75

Holders

As of February 14, 2005 there were approximately 93 holders of record of Sangamo's common stock. This number does not include "street name" or beneficial holders, whose shares are held of record by banks, brokers and other financial institutions.

Dividends

Sangamo has not paid dividends on its common stock, and currently does not plan to pay any cash dividends in the foreseeable future.

Stock Trading Plans

From time to time our directors, executive officers and other insiders may adopt stock trading plans pursuant to Rule 10b5-1 of the Securities Exchange Act of 1934, as amended. These plans are established to allow individuals to diversify their investment portfolio while avoiding conflicts of interest or the appearance of any such conflict that might arise from their positions with the company. Starting in the first quarter of 2002, two of our officers, including Edward O. Lanphier II, President and CEO, and one of our directors, have made periodic sales of the Company's stock pursuant to such plans.

Item 6. ***Selected Consolidated Financial Data***

The following Selected Financial Data should be read in conjunction with "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Item 8. Financial Statements and Supplementary Data" included elsewhere in this Annual Report on Form 10-K.

SELECTED FINANCIAL DATA

	Year Ended December 31,				
	2004	2003	2002	2001	2000
	(In thousands, except per share data)				
Statement of Operations Data:					
Total revenues	$ 1,315	$ 2,579	$ 4,343	$ 4,885	$ 3,433
Operating expenses:					
Research and development	11,046	10,187	12,213	12,952	8,462
General and administrative	4,256	3,594	3,815	3,638	2,602
Stock-based compensation	663	567	1,499	3,674	4,852
Restructuring charge(1)	—	—	371	—	—
Goodwill impairment(2)	—	—	15,250	—	—
Patent impairment(2)	—	—	2,760	—	—
Acquired in-process research and development	—	—	—	13,062	—
Total operating expenses	15,965	14,348	35,908	33,326	15,916
Loss from operations	(14,650)	(11,769)	(31,565)	(28,441)	(12,483)
Interest income, net	620	752	1,366	3,192	3,417
Other income	212	584	435	—	—
Net loss	(13,818)	(10,433)	(29,764)	(25,249)	(9,066)
Deemed dividend upon issuance of convertible preferred stock	—	—	—	—	(1,500)
Net loss attributable to common stockholders	$ (13,818)	$ (10,433)	$ (29,764)	$ (25,249)	$ (10,566)
Basic and diluted net loss per common share	$ (0.55)	$ (0.42)	$ (1.22)	$ (1.09)	$ (0.61)
Shares used in computing basic and diluted net loss per common share	25,126	24,811	24,493	23,120	17,383

(1) See Note 3 in the footnotes to consolidated financial statements

(2) See Notes 1, 4 and 5 in the footnotes to consolidated financial statements

	Year Ended December 31,				
	2004	2003	2002	2001	2000
	(In thousands)				
Stock-Based Compensation:					
Research and development stock-based compensation	$ 649	$ 451	$ 1,150	$ 2,562	$ 2,885
General and administrative stock-based compensation	14	116	349	1,112	1,967
Total stock-based compensation	$ 663	$ 567	$ 1,499	$ 3,674	$ 4,852

	December 31,				
	2004	2003	2002	2001	2000
	(In thousands)				
Balance Sheet Data:					
Cash, cash equivalents, marketable securities, and interest receivable	$ 33,520	$ 44,343	$ 52,575	$ 62,560	$ 64,681
Working capital	32,028	43,714	52,115	61,102	64,477
Total assets	34,725	46,232	56,227	85,017	68,925
Long-term debt	—	—	—	—	—
Accumulated deficit	(97,115)	(83,297)	(72,864)	(43,100)	(17,851)
Total stockholders' equity	32,377	44,661	54,246	82,349	66,890

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

The discussion in "Management's Discussion and Analysis of Financial Condition and Results of Operations" contains trend analysis, estimates and other 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. These forward-looking statements include, without limitation, statements containing the words "believes," "anticipates," "expects," "continue," and other words of similar import or the negative of those terms or expressions. Such forward-looking statements are subject to known and unknown risks, uncertainties, estimates and other factors that may cause the actual results, performance or achievements of the Company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Actual results could differ materially from those set forth in such forward-looking statements as a result of, but not limited to, the "Risks Related to Our Business" described in Part I, Item 1. You should read the following discussion and analysis along with the "Selected Financial Data" and the financial statements and notes attached to those statements included elsewhere in this report.

Overview

We were incorporated in June 1995. From our inception through December 31, 2004, our activities related primarily to establishing and operating a biotechnology research and development organization and developing relationships with our corporate collaborators. Our scientific and business development endeavors currently focus on the engineering of novel zinc finger DNA binding proteins (ZFPs) for the regulation and modification of genes. We have incurred net losses since inception and expect to incur losses in the future as we continue our research and development activities. To date, we have funded our operations primarily through the issuance of equity securities, borrowings, payments from federal government research grants and from corporate collaborators and strategic partners. As of December 31, 2004, we had an accumulated deficit of $97.1 million.

Our revenues have consisted primarily of revenues from our corporate partners for ZFP TFs, contractual payments from strategic partners for research programs and research milestones, and Federal government research grant funding. We expect revenues will continue to fluctuate from period to period and there can be no assurance that new collaborations or partner fundings will continue beyond their initial terms.

In 2004, we have placed more emphasis on higher-value therapeutic product development and related strategic partnerships and less emphasis on our Universal GeneTools® collaborations. We believe this shift in emphasis has the potential to increase the return on investment to our stockholders by allocating capital resources to higher value, therapeutic product development activities. At the same time, it may reduce our revenues over the next several years and it increases our financial risk by increasing expenses associated with product development. We have filed an Investigational New Drug (IND) application with the U.S. Food and Drug Administration (FDA) and plan to initiate our own Phase I clinical trial of a ZFP Therapeutic in patients with diabetic neuropathy within the first quarter of 2005. Development of novel therapeutic products is costly and is subject to a lengthy and uncertain regulatory process by the FDA. Our future products are gene-based therapeutics. Adverse events in both our own clinical program and other programs in gene therapy may have a negative impact on regulatory approval, the willingness of potential commercial partners to enter into agreements and the perception of the public.

Research and development expenses consist primarily of salaries and related personnel expenses, laboratory supplies, allocated facilities costs, subcontracted research expenses, and expenses for patent prosecution, trademark registration and technology licenses. Research and development costs incurred in connection with collaborator-funded activities are expensed as incurred. We believe that continued investment in research and development is critical to attaining our strategic objectives. We expect these expenses will increase significantly as we focus increasingly on development of ZFP Therapeutics. The Company is also developing zinc finger nucleases (ZFNs) for therapeutic gene correction and therapeutic gene modification as a treatment and possible cure for certain monogenic and infectious diseases. Additionally, in order to develop

ZFP TFs as commercially relevant therapeutics, we expect to expend additional resources for expertise in the manufacturing, regulatory affairs and clinical research aspects of biotherapeutic development.

General and administrative expenses consist primarily of salaries and related personnel expenses for executive, finance and administrative personnel, professional fees, allocated facilities costs and other general corporate expenses. As we pursue commercial development of our therapeutic leads we expect the business aspects of the Company to become more complex. We may be required in the future to add personnel and incur additional costs related to the maturity of our business.

Critical Accounting 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. Sangamo believes the following critical accounting policies have significant effect in the preparation of our consolidated financial statements.

Revenue Recognition

In accordance with Staff Accounting Bulletin No. 104, “Revenue Recognition,” revenue from research activities made under strategic partnering agreements is recognized as the services are provided when there is persuasive evidence that an arrangement exists, delivery has occurred, the price is fixed or determinable, and collectibility is reasonably assured. Amounts received under such agreements are deferred until the above criteria are met and the research services are performed. Sangamo’s federal government research grants are typically multi-year agreements and provide for the reimbursement of qualified expenses for research and development as defined under the terms of the grant agreement. Revenue under grant agreements is recognized when the related research expenses are incurred. Grant reimbursements are typically received on a quarterly basis and are subject to the issuing agency’s right of audit.

Sangamo recognizes revenue from its Universal GeneTools® agreements when ZFP TFs are delivered to the Universal GeneTools® collaborators, persuasive evidence of an agreement exists, there are no unfulfilled obligations, the price is fixed and determinable, and collectibility is reasonably assured. Generally, Sangamo receives partial payments from these collaborations prior to the delivery of ZFP TFs and the recognition of these revenues is deferred until the ZFP TFs are delivered, the risk of ownership has passed to the collaborator and all performance obligations have been satisfied. Upfront or signature payments received upon the signing of a Universal GeneTools® agreement are generally recognized ratably over the applicable period of the agreement or as ZFP TFs are delivered.

Milestone payments under research, partnering, or licensing agreements are recognized as revenue upon the achievement of mutually agreed upon milestones, provided that (i) the milestone event is substantive and its achievement is not reasonably assured at the inception of the agreement, and (ii) there are no further significant performance obligations associated with the milestone payment.

In accordance with Emerging Issues Task Force Issue No. 00-21, “Revenue Arrangements with Multiple Deliverables,” revenue arrangements entered into after June 15, 2003, that include multiple deliverables, are divided into separate units of accounting if the deliverables meet certain criteria, including whether the fair value of the delivered items can be determined and whether there is evidence of fair value of the undelivered items. In addition, the consideration is allocated among the separate units of accounting based on their fair values, and the applicable revenue recognition criterion is considered separately for each of the separate units of accounting.

Stock-Based Compensation

Sangamo accounts for employee and director stock options using the intrinsic value method in accordance with Accounting Principles Board Opinion No. 25, “Accounting for Stock Issued to Employees”

("APB 25") and has adopted the disclosure-only alternative of Financial Accounting Standards Board Statement No. 123, "Accounting for Stock-Based Compensation" ("FAS 123"). Stock options granted to non-employees, including Scientific Advisory Board Members, are accounted for in accordance with Emerging Issues Task Force Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services," which requires the value of such options to be measured and compensation expense to be recorded as they vest over a performance period. The fair value of such options is determined using the Black-Scholes model. Pursuant to FAS 123, as amended by FAS 148, "Accounting for Stock-Based Compensation — Transition and Disclosure," the effect on net loss and related net loss per share has been calculated, had compensation cost for stock-based compensation plans been determined based upon the fair value method prescribed under FAS 123 (See Note 1 — Organization and Summary of Significant Accounting Policies).

Goodwill and Patents Impairment

In connection with our acquisition of Gendaq Limited in July 2001, and also taking into consideration an independent valuation, we allocated $15.3 million to goodwill and $3.4 million to patents with estimated useful lives of 7 years, the term of expected benefit. The valuation in connection with the initial purchase price allocation and the ongoing evaluation for impairment of goodwill and intangible assets requires significant management estimates and judgment. The purchase price allocation process requires management estimates and judgment as to expectations for various products and business strategies. If any of the significant assumptions differ from the estimates and judgments used in the purchase price allocation, this could result in different valuations for goodwill and intangible assets. Once the purchase price allocation is established, we must test goodwill annually for impairment using a two-step process as required by FAS No. 142 "Goodwill and Other Intangible Assets." In addition, in certain circumstances, we must assess if goodwill should be tested for impairment between annual tests. Intangible assets with definite useful lives must be tested for impairment in accordance with FAS No. 144 "Accounting for the Impairment or Disposal of Long-Lived Assets." When we conduct our impairment tests for goodwill and intangibles, factors that are considered important in determining whether impairment might exist include significant continued under-performance compared to peers, significant changes in our underlying business and products, or other factors specific to each asset being evaluated. Any changes in key assumptions about the business and its prospects, or changes in market conditions or other externalities, could result in an impairment charge and such a charge could have a material adverse effect on our consolidated results of operations. We performed the first of the required annual impairment tests for goodwill as of September 30, 2002, which resulted in a one-time charge being taken for the entire balance of goodwill of $15.3 million. Given that goodwill was determined to be impaired, we also assessed our long-lived assets for impairment at that time, resulting in an additional one-time charge of $2.8 million being taken for the entire unamortized balance of patents.

Results of Operations

Years Ended December 31, 2004, 2003 and 2002

Total revenues

	Year Ended December 31,							
	2004	2003	Change	% Change	2003	2002	Change	% Change
	(In thousands, except percentage values)							
Revenues:								
Collaboration agreements	$ 947	$ 2,205	$ (1,258)	(57)%	$ 2,205	$ 4,106	$ (1,901)	(46)%
Federal government research grants	368	374	(6)	(2)%	374	237	137	58%
Total revenues	$ 1,315	$ 2,579	$ (1,264)	(49)%	$ 2,579	$ 4,343	$ (1,764)	(41)%

We are increasing the emphasis of our research and development activities on ZFP Therapeutics and are moving away from our historic emphasis on Enabling Technology agreements. Over the next several years, this change in resource allocation will reduce our revenues.

Total revenues consisted of revenues from collaboration agreements, strategic partnerships and federal government research grants. Revenues from our corporate collaboration and strategic partnering agreements were $947,000 in 2004, compared to $2.2 million in 2003, and $4.1 million in 2002. The decrease in 2004 from 2003 was principally attributable to lower revenues of approximately $915,000 recognized from a therapeutics partnership with Edwards Lifesciences Corporation ("Edwards") as well as lower revenues of $343,000 associated with Universal GeneTools® agreements. The decrease in revenues under the agreement with Edwards is due to completion of our preclinical research and Edwards' payments for those activities under the agreement. Revenues associated with Universal GeneTools® agreements have declined as competing technology has been commoditized and as our emphasis has shifted to therapeutic product development. The decrease in revenues in 2003 from 2002 was principally attributable to lower revenues of $1.5 million associated with Universal GeneTools® agreements as well as lower revenues of $425,000 recognized from a therapeutics partnership with Edwards. Revenues attributable to milestone achievement and collaborative research and development performed under the Edwards agreement were $615,000, $1.5 million and $2.0 million for 2004, 2003 and 2002, respectively. Federal government research grant revenues were $368,000 in 2004, $374,000 in 2003, and $237,000 in 2002. The increase in 2004 and 2003 over 2002 represented the continuation of two grants, one of which began in 2002 and the other in 2001, and the introduction of a new grant during the latter portion of 2004. We plan to continue to apply for federal government research grants.

Operating Expenses

	Year Ended December 31,							
	2004	2003	Change	% Change	2003	2002	Change	% Change
	(In thousands, except percentage values)							
Operating expenses:								
Research and development	$ 11,046	$ 10,187	$ (859)	(8)%	$ 10,187	$ 12,213	$ 2,026	17%
General and administrative	4,256	3,594	(662)	(18)%	3,594	3,815	221	6%
Stock-based compensation	663	567	(96)	(17)%	567	1,499	932	62%
Restructuring charge	—	—	—	0%	—	371	371	100%
Goodwill impairment	—	—	—	0%	—	15,250	15,250	100%
Patent impairment	—	—	—	0%	—	2,760	2,760	100%
Total operating expenses	$ 15,965	$ 14,348	$ (1,617)	(11)%	$ 14,348	$ 35,908	$ 21,560	60%

Research and development expenses

Over the past three fiscal years, research and development expenses have consisted primarily of salaries and related personnel expenses, laboratory supplies, allocated facilities costs, subcontracted research expenses, and expenses for patent prosecution, trademark registration and technology licenses. We expect to continue to devote substantial resources to research and development in the future and expect research and development expenses to increase in the next several years if we are successful in advancing our ZFP Therapeutic product candidates into clinical trials. To the extent we collaborate with others with respect to clinical trials, increases in research and development expenses may be reduced or avoided.

Research and development expenses were $11.0 million in 2004, compared to $10.2 million in 2003 and $12.2 million in 2002. The increase of $859,000 from 2003 to 2004 was principally due to pre-clinical studies and manufacturing costs of $1.8 million in connection with our diabetic neuropathy program. This was partially offset by decreased expenses for salaries and related benefits of $687,000 and laboratory supplies of $343,000. The decrease of $2.0 million from 2002 to 2003 was principally due to the consolidation of the research activities at Gendaq, our wholly owned U.K. subsidiary, into our Richmond operations during the third quarter of 2002. Specifically, decreased expenses were salary and benefits of $897,000, lab supplies of $705,000 and facility-related costs of $390,000.

Our current research and development programs are focused on the advancement of our ZFP TF technology for several potential applications. Among these are ZFP Therapeutics for cardiovascular disease, neurological disorders, cancer and monogenic diseases, ZFP TF-engineered cell lines for drug screening and

protein production, ZFP TFs for the discovery and validation of genes and drug targets, and ZFP TFs for applications in agricultural biotechnology.

Below is a summary of our programs partially funded by collaborators and the development phase of the leading application:

Program	Collaborator	Stage
ZFP Therapeutics	Edwards	Clinical
ZFP TF-engineered cell lines for the manufacture of protein pharmaceuticals	Medarex	Research/Marketing

Below is a summary of our programs funded internally and the development stage of the leading application:

Internal Programs

Program	Stage
ZFP Therapeutics	Clinical
Gene Correction	Research
ZFP TF-engineered cell lines for small molecule drug discovery	Research/Marketing
ZFP TF-engineered cell lines for the manufacture of protein pharmaceuticals	Research/Marketing
Discovery and validation of gene targets	Marketing
Agricultural biotechnology	Research

Due to the early stage of the Company's various internal research and development projects, the Company does not track costs associated with its internal projects on a project-by-project basis. Drug development is inherently uncertain and the successful completion of our development programs is subject to numerous technological challenges and risks and we cannot presently estimate anticipated completion dates for any of our programs. Material cash inflows associated with the sale of products, if any, which result from our research efforts are not expected for at least five years. See Risks Related to Our Business — "Our potential therapeutic products are subject to a lengthy and uncertain regulatory process, and if these potential products are not approved, we will not be able to commercialize these products" and "Our gene regulation technology is relatively new, and if we are unable to use this technology in all our intended applications, it would limit our revenue opportunities."

General and administrative expenses

General and administrative expenses consist primarily of salaries and related personnel expenses for executive, finance and administrative personnel, professional fees, allocated facilities costs and other general corporate expenses. As we pursue commercial development of our therapeutic leads, we expect the business aspects of the Company to become more complex. We may be required in the future to add personnel and incur additional costs related to the maturity of our business.

General and administrative expenses were $4.3 million during 2004, $3.6 million in 2003 and $3.8 million in 2002. The increase of $662,000 from 2003 to 2004 was principally due to programs for compliance with Section 404 of the Sarbanes-Oxley Act of 2002, the related regulations regarding our required assessment of our internal controls over financial reporting and our external auditors' audit of that assessment as well as increased expenses of $110,000 related to corporate communications. General and administrative expenses were consistent from 2002 to 2003.

Restructuring charge

Restructuring charges of $371,000 related to the closure of the Gendaq facility were recorded in 2002. These expenses primarily represent incremental employee restructuring costs and a loss on disposal of fixed assets of $74,000.

Stock-based compensation

Sangamo accounts for employee and director stock options using the intrinsic value method in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25") and has adopted the disclosure-only alternative of Financial Accounting Standards Board Statement No. 123, "Accounting for Stock-Based Compensation" ("FAS 123"). Stock options granted to non-employees, including Scientific Advisory Board Members, are accounted for in accordance with Emerging Issues Task Force Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services," which requires the value of such options to be measured and compensation expense to be recorded as they vest over a performance period. The fair value of such options is determined using the Black-Scholes model.

Stock-based compensation expenses were $663,000 for 2004, $567,000 for 2003 and $1,499 related to 2002. The increase from 2003 to 2004 of $96,000 was primarily attributable to higher non-employee stock-based compensation expense partially offset by lower amortization expense related to deferred compensation for stock options issued prior to the Company's initial public offering in 2000. The decrease of $932,000 from 2002 to 2003 was attributable to lower non-employee stock-based compensation expense and lower amortization expense related to deferred compensation for stock options issued prior to the Company's initial public offering in 2000. See Recent Accounting Pronouncements below.

Impairment charges

During 2002, in accordance with FAS No. 142, the Company performed the required two-step annual impairment test of goodwill. In the first step of the analysis, we compared the carrying value of the Company to its fair value and determined that goodwill was impaired. The fair value of the Company was determined using the income approach. The income approach focuses on the income-producing capability of an asset, measuring the current value of the asset by calculating the present value of its future economic benefits such as cash earnings, cost savings, tax benefits and proceeds from disposition incorporating current equity market conditions in the United States, industry-specific volatility factors, general equity market forecasts, the risk-free rate for the use of funds and the expected rate of inflation. The Company recognized an impairment charge of $15.3 million, representing the entire capitalized balance of goodwill at the time of the test.

FAS 142 requires that if an impairment test of goodwill and any other asset is required at the same time, impairment tests of all other assets should be completed and reflected in the carrying value of the Company prior to the completion of the goodwill impairment test. If it is determined that an asset is not recoverable, FAS 144 directs that an impairment loss should be recognized based on the excess of its carrying value over its fair value. Impairment tests of the Company's long-lived assets were conducted in accordance with FAS 144. Based upon the results of this review, we concluded that the carrying amount of patents was not recoverable. The Company recognized an impairment loss of $2.8 million, representing the entire unamortized balance of patents. Management assessed all other assets as being recoverable.

Interest income, net

	Year Ended December 31,							
	2004	2003	Change	% Change	2003	2002	Change	% Change
	(In thousands, except percentage values)							
Interest income, net	$ 620	$ 752	$ (132)	(18)%	$ 752	$ 1,366	$ (614)	(45)%

Interest income, net

Net interest income was $620,000 in 2004, as compared to $752,000 in 2003, and $1.4 million in 2002. The decline over the three-year period reflects lower average cash and investment balances due to the utilization of cash to fund operations.

Other income

	Year Ended December 31,						
	2004	2003	Change	% Change	2003	2002	Change	% Change
	(In thousands, except percentage values)							
Other income	$ 212	$ 584	$ (372)	(64)%	$ 584	$ 435	$ 149	34%

Other income

During 2004 other income of $212,000 was comprised of a net gain on foreign currency translation of $261,000 and an insurance settlement of $22,000. This was partially offset by an other than temporary loss on our marketable securities of $71,000. During 2003, other income of $584,000 was principally comprised of a net gain on foreign currency translation of $298,000, an insurance settlement of $180,000 related to a equipment shipping claim and a research and development credit of $112,000. During 2002, we recognized a net gain of $435,000 on foreign currency translation. Of that gain, $367,000 represents cumulative currency translation recognized as a result of the closure of our Gendaq facility in the U.K.

We incurred net operating losses in 2004, 2003 and 2002, and consequently we did not pay any federal or state income taxes.

Liquidity and Capital Resources

Since inception, we have financed our operations primarily through the sale of equity securities, payments from corporate collaborators, federal government research grants and financing activities such as a bank line of credit. As of December 31, 2004, we had cash, cash equivalents, investments and interest receivable totaling $33.5 million.

Net cash used in operating activities was $10.2 million in 2004, $7.4 million in 2003, and $8.9 million in 2002. In all periods, net cash used in operating activities was primarily due to funding of net operating losses. During 2004, the use of cash related to the net operating loss of $13.8 million was partially offset by non-cash charges and net increases in asset balances of $2.8 million and by amortization on investments of $868,000. During 2003, the use of cash related to the net operating loss of $10.4 million was partially offset by non-cash charges and net increases in asset balances of $1.8 million and by amortization on investments of $1.2 million. During 2002, the use of cash related to the net operating loss of $29.8 million was partially offset by goodwill and patent impairment charges of $15.3 million and $2.8 million, respectively, as well as other non-cash charges and net increases in asset balances of $2.8 million.

Net cash provided by (used in) investing activities was $8.4 million in 2004, $(623,000) in 2003 and $18.9 million in 2002. Cash was used during these periods to purchase investments and property and equipment and was offset by the maturities and sale of available-for-sale securities.

Net cash provided by financing activities was $553,000 and $227,000 in 2004 and 2003, respectively, and was solely related to proceeds from issuance of common stock. Net cash provided by financing activities in 2002 of $183,000 was related to proceeds from issuance of common stock, partially offset by payments made for an equipment loan.

While we expect our rate of cash usage to increase in the future, in particular, in support of our product development endeavors, we believe that the available cash resources, funds received from corporate collaborators, strategic partners and federal government research grants will be sufficient to finance our operations through 2006. We may need to raise additional capital to fund our ZFP Therapeutic development activities. Additional capital may not be available in terms acceptable to us, or at all. If adequate funds are not available, our business and our ability to develop our technology and our ZFP Therapeutic products would be harmed.

There is no provision for income taxes because we have incurred losses. As of December 31, 2004, Sangamo had net operating loss carryforwards for federal income tax purposes of approximately $50.2 million, which expire in the years 2010 through 2024. The Company also has state operating loss carryforwards of

approximately $21.5 million, which expire in the years 2005 through 2014. The Company also has federal and state research and development tax credit carryforwards of $1.6 million and $1.6 million, respectively. The federal research credits will begin to expire in the year 2018 through 2024 and the state research credits have no expiration date. Utilization of the Company's net operating loss may be subject to substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code and similar state provisions. Such an annual limitation could result in the expiration of the net operating loss before utilization.

Contractual Obligations and Commercial Commitments

As of December 31, 2004 we had contractual obligations and commercial commitments as follows (in thousands):

	Payments Due by Period				
Contractual Obligations	**Total**	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**More than 5 Years**
Operating leases	$ 4,562	$ 423	$ 1,334	$ 1,437	$ 1,368
License obligations	1,436	315	1,121	—	—
Total contractual obligations	$ 5,998	$ 738	$ 2,455	$ 1,437	$ 1,368

Operating leases consist of base rents for facilities we occupy in Richmond, California. License obligations consist of ongoing license maintenance fees and royalties due from sales of ZFP TFs.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS No. 123R "Share-Based Payment." This statement is a revision to SFAS 123 and supersedes Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees," and amends FASB Statement No. 95, "Statement of Cash Flows." This statement requires a public entity to expense the cost of employee services received in exchange for an award of equity instruments. This statement also provides guidance on valuing and expensing these awards, as well as disclosure requirements of these equity arrangements. This statement is effective for the first interim reporting period that begins after June 15, 2005.

SFAS 123R permits public companies to choose between the following two adoption methods:

1. A "modified prospective" method in which compensation cost is recognized beginning with the effective date (a) based on the requirements of SFAS 123R for all share-based payments granted after the effective date and (b) based on the requirements of Statement 123 for all awards granted to employees prior to the effective date of SFAS 123R that remain unvested on the effective date, or

2. A "modified retrospective" method which includes the requirements of the modified prospective method described above, but also permits entities to restate based on the amounts previously recognized under SFAS 123 for purposes of pro forma disclosures either (a) all prior periods presented or (b) prior interim periods of the year of adoption.

As permitted by SFAS 123, we currently account for share-based payments to employees using APB Opinion 25's intrinsic value method and, as such, we generally recognize no compensation cost for employee stock options. The impact of the adoption of SFAS 123R cannot be predicted at this time because it will be depend on levels of share-based payments granted in the future. However, valuation of employee stock options under SFAS 123R is similar to SFAS 123, with minor exceptions. For information about what our reported results of operations and earnings per share would have been had we adopted SFAS 123, please see the discussion under the heading "Stock Based Compensation" in Note 1 to our Consolidated Financial Statements. Accordingly, the adoption of SFAS 123R's fair value method will have a significant impact on our results of operations, although it will have no impact on our overall financial position. Due to timing of the release of SFAS 123R, we have not yet completed the analysis of the ultimate impact that this new pronouncement will have on the results of operations, nor the method of adoption for this new standard.

Item 7A. ***Quantitative and Qualitative Disclosures about Market Risk***

Our exposure to market risk for changes in interest rates relates primarily to our cash equivalents and investments. The investments are available-for-sale. We do not use derivative financial instruments in our investment portfolio. We attempt to ensure the safety and preservation of our invested funds by limiting default and market risks. Our cash and investments policy emphasizes liquidity and preservation of principal over other portfolio considerations. We select investments that maximize interest income to the extent possible within these guidelines. We invest excess cash in securities with different maturities to match projected cash needs and limit concentration of credit risk by diversifying our investments among a variety of high credit-quality issuers. We mitigate default risk by investing in only investment-grade securities. The portfolio includes marketable securities with active secondary or resale markets to ensure portfolio liquidity. All investments have a fixed interest rate and are carried at market value, which approximates cost. If market interest rates were to increase by one percent from December 31, 2004, the fair value of our portfolio would decline by less than $100,000. The modeling technique used measures the change in fair values arising from an immediate hypothetical shift in market interest rates and assumes ending fair values include principal plus accrued interest. We recognized a gain on foreign currency translation of $261,000, $298,000 and $435,000 for 2004, 2003 and 2002, respectively.

Item 8. ***Financial Statements and Supplementary Data***

SANGAMO BIOSCIENCES, INC.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders
Sangamo Biosciences, Inc.

We have audited the accompanying consolidated balance sheets of Sangamo Biosciences, Inc. as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2004. 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 the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Sangamo Biosciences, Inc. at December 31, 2004 and 2003, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2004, in conformity with U.S. generally accepted accounting principles.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Sangamo Biosciences Inc.'s internal control over financial reporting as of December 31, 2004, based on the criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 18, 2005 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Palo Alto, California
February 18, 2005

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders
Sangamo BioSciences, Inc.

We have audited management's assessment, included in the accompanying "Management's Report on Internal Control over Financial Reporting" included in Item 9A, that Sangamo BioSciences, Inc. maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). The management of Sangamo BioSciences, Inc. is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

In our opinion, management's assessment that Sangamo BioSciences, Inc. maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Sangamo BioSciences, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Sangamo BioSciences, Inc. as of December 31, 2004 and 2003, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2004 and our report dated February 18, 2005 and expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Palo Alto, California
February 18, 2005

SANGAMO BIOSCIENCES, INC.

CONSOLIDATED BALANCE SHEETS

	December 31, 2004	December 31, 2003
	(In thousands, except share and per share amounts)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 8,626	$ 9,803
Marketable securities	24,634	34,052
Interest receivable	260	488
Accounts receivable	569	658
Prepaid expenses	287	284
Total current assets	34,376	45,285
Property and equipment, net	318	906
Other assets	31	41
Total assets	$ 34,725	$ 46,232
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued liabilities	$ 906	$ 815
Accrued compensation and employee benefits	657	636
Deferred revenue	785	120
Total liabilities	2,348	1,571
Commitments and contingencies		
Stockholders' equity:		
Common stock, $0.01 par value; 80,000,000 shares authorized, 25,271,059 and 24,954,243 shares issued and outstanding at December 31, 2004 and 2003, respectively	129,482	127,927
Deferred stock compensation	—	(1)
Accumulated deficit	(97,115)	(83,297)
Accumulated other comprehensive income	10	32
Total stockholders' equity	32,377	44,661
Total liabilities and stockholders' equity	$ 34,725	$ 46,232

See accompanying Notes to Consolidated Financial Statements.

SANGAMO BIOSCIENCES, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2004	2003	2002
		(In thousands, except per share amounts)	
Revenues:			
Collaboration agreements	$ 947	$ 2,205	$ 4,106
Federal government research grants	368	374	237
Total revenues	1,315	2,579	4,343
Operating expenses:			
Research and development (excludes $649, $451 and $1,150 of stock-based compensation expense for 2004, 2003 and 2002, respectively)	11,046	10,187	12,213
General and administrative (excludes $14, $116 and $349 of stock-based compensation expense for 2004, 2003 and 2002, respectively)	4,256	3,594	3,815
Stock-based compensation	663	567	1,499
Restructuring charge	—	—	371
Goodwill impairment	—	—	15,250
Patent impairment	—	—	2,760
Total operating expenses	15,965	14,348	35,908
Loss from operations	(14,650)	(11,769)	(31,565)
Interest income, net	620	752	1,366
Other income	212	584	435
Net loss	$ (13,818)	$ (10,433)	$ (29,764)
Basic and diluted net loss per share	$ (0.55)	$ (0.42)	$ (1.22)
Shares used in computing basic and diluted net loss per share	25,126	24,811	24,493

See accompanying Notes to Consolidated Financial Statements.

SANGAMO BIOSCIENCES, INC.

CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

	Common Stock		Deferred Stock Compensation	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
	Shares	Amount				
Balances at December 31, 2001	24,482,050	127,161	(2,125)	(43,100)	413	82,349
Issuance of common stock upon exercise of options and warrants, net of repurchases	176,566	216	—	—	—	216
Issuance of common stock under employee stock purchase plan	82,097	252	—	—	—	252
Deferred stock compensation	—	232	(232)	—	—	—
Amortization of deferred stock compensation and vesting of non-qualified stock options	—	489	1,342	—	—	1,831
Reversal of deferred compensation due to employee terminations	—	(1,116)	784	—	—	(332)
Comprehensive loss:						
Unrealized loss on investments	—	—	—	—	(158)	(158)
Translation adjustment	—	—	—	—	(148)	(148)
Net loss	—	—	—	(29,764)	—	(29,764)
Comprehensive loss	—	—	—	—	—	(30,070)
Balances at December 31, 2002	24,740,713	127,234	(231)	(72,864)	107	54,246
Issuance of common stock upon exercise of options, net of repurchases	71,578	14	—	—	—	14
Issuance of common stock in connection with license agreement	25,000	130	—	—	—	130
Issuance of common stock under employee stock purchase plan	116,952	213	—	—	—	213
Amortization of deferred stock compensation	—	—	215	—	—	215
Vesting of non-qualified stock options	—	388	—	—	—	388
Reversal of deferred compensation due to employee terminations	—	(52)	15	—	—	(37)
Comprehensive loss:						
Unrealized loss on investments	—	—	—	—	(81)	(81)
Other than temporary loss	—	—	—	—	6	6
Net loss	—	—	—	(10,433)	—	(10,433)
Comprehensive loss	—	—	—	—	—	(10,508)
Balances at December 31, 2003	24,954,243	127,927	(1)	83,297	32	44,661
Issuance of common stock upon exercise of options, net of repurchases	120,740	294	—	—	—	294
Issuance of common stock in connection with license agreement	62,500	340	—	—	—	340
Issuance of common stock under employee stock purchase plan	133,576	259	—	—	—	259
Amortization of deferred stock compensation	—	—	1	—	—	1
Vesting of non-qualified stock options	—	662	—	—	—	662
Comprehensive loss:						
Unrealized loss on investments	—	—	—	—	(93)	(93)
Other than temporary loss	—	—	—	—	71	71
Net loss	—	—	—	(13,818)	—	(13,818)
Comprehensive loss	—	—	—	—	—	(13,841)
Balances at December 31, 2004	25,271,059	$ 129,482	$ —	$ (97,115)	$ 10	$ 32,377

See accompanying Notes to Consolidated Financial Statements.

SANGAMO BIOSCIENCES, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2004	2003	2002
		(In thousands)	
Operating activities:			
Net loss	$ (13,818)	$ (10,433)	$ (29,764)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	611	847	955
Amortization of patents	—	—	360
Amortization of premium/ discount on investment	868	1,146	796
Net (gain) loss on disposal of property and equipment	—	(112)	74
Realized loss on investment	71	6	—
Issuance of common stock in connection with license agreement	340	130	—
Gain on currency translation	—	—	(367)
Goodwill impairment	—	—	15,250
Patent impairment	—	—	2,760
Amortization of deferred stock compensation	1	178	1,198
Other stock-based compensation	662	388	301
Forgiveness of notes receivable	—	188	—
Changes in operating assets and liabilities:			
Interest receivable	228	(56)	534
Accounts receivable	89	440	(335)
Prepaid expenses and other assets	7	248	(236)
Accounts payable and accrued liabilities	91	(122)	(324)
Accrued compensation and employee benefits	21	(33)	(2)
Deferred revenue	665	(255)	(76)
Net cash used in operating activities	(10,164)	(7,440)	(8,876)
Investing activities:			
Purchases of investments	(20,702)	(44,803)	(36,289)
Maturities of investments	29,160	44,028	50,687
Sales of investments	—	—	4,467
Proceeds from disposal of property and equipment	—	216	79
Purchases of property and equipment	(24)	(64)	(69)
Net cash provided by (used in) investing activities	8,434	(623)	18,875
Financing activities:			
Proceeds from issuance of common stock	553	227	468
Payments on equipment loan	—	—	(285)
Net cash provided by financing activities	553	227	183
Effect of exchange rate changes on cash	—	—	(187)
Net increase (decrease) in cash and cash equivalents	(1,177)	(7,836)	9,995
Cash and cash equivalents, beginning of period	9,803	17,639	7,644
Cash and cash equivalents, end of period	$ 8,626	$ 9,803	$ 17,639
Noncash investing and financing activities:			
Deferred compensation related to stock options	$ —	$ —	$ 232
Supplemental disclosures:			
Cash paid for interest	$ —	$ —	$ 3

See accompanying Notes to Consolidated Financial Statements.

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Summary of Significant Accounting Policies

Sangamo and Basis of Presentation

Sangamo BioSciences, Inc. ("Sangamo") was incorporated in the State of Delaware on June 22, 1995 and is focused on the development and commercialization of novel transcription factors for the regulation of gene expression. Our gene regulation technology platform is enabled by the engineering of a class of transcription factors known as zinc finger DNA binding proteins ("ZFPs"). Potential applications of Sangamo's technology include development of human therapeutics, plant agriculture and pharmaceutical discovery. Sangamo will require additional financial resources to complete the development and commercialization of its products including ZFP Therapeutics.

Sangamo is currently working on a number of long-term development projects that will involve experimental and unproven technology. The projects may require several years and substantial expenditures to complete and ultimately may be unsuccessful. We plan to finance operations with available cash resources, funds received under federal government research grants and Universal GeneTools® collaborations and strategic partnerships, and from the issuance of equity or debt securities. Sangamo believes that its available cash, cash equivalents and investments as of December 31, 2004, along with expected revenues from Universal GeneTools® collaborations and strategic partnerships, will be adequate to fund its operations through 2006. Sangamo will need to raise substantial additional capital to fund subsequent operations and complete the development and commercialization of its products either through significant corporate partnerships, sales of zinc finger DNA binding protein transcription factors ("ZFP TFs") for pharmaceutical discovery, government research grants or issuance of equity securities. Sangamo may seek to raise additional capital when conditions permit, however there is no assurance funding will be available on favorable terms, if at all.

The consolidated financial statements include the accounts of Sangamo and its wholly owned subsidiary, Gendaq Limited, after elimination of all material intercompany balances and transactions.

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and the accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents

Sangamo considers all highly liquid investments purchased with original maturities of three months or less at the purchase date to be cash equivalents. Sangamo's cash and cash equivalents are maintained with three financial institutions. Cash and cash equivalents of $8.6 million and $9.8 million at December 31, 2004 and 2003, respectively, consist of deposits in money market investment accounts and corporate operating accounts.

Marketable Securities

Sangamo classifies its marketable securities as available-for-sale and records its investments at fair value in accordance with Statement of Financial Accounting Standards ("FAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Available-for-sale securities are carried at estimated fair value based on quoted market prices. Debt securities are held at amortized cost and the discount/ premium is accounted for using the straight-line method. Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are included in interest income. Unrealized holding gains and losses are included in accumulated other comprehensive income. Interest on securities classified as available-for-sale is also included in interest income, which is determined using the specific identification method. During 2004, Sangamo recorded $71,000 in other than temporary losses on its investments.

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The table below summarizes our available-for-sale securities (in thousands):

	Amortized Cost	Gross Unrealized Gains/ (Losses)	Estimated Fair Value
December 31, 2004			
U.S. government investments:			
Maturing within 1 year	$ 7,243	$ (2)	$ 7,241
Maturing between 1 and 2 years	7,087	(42)	7,045
Total government investments	14,330	(44)	14,286
Corporate debt investments:			
Maturing within 1 year	3,786	3	3,789
Maturing between 1 and 2 years	6,586	(27)	6,559
Total corporate investments	10,372	(24)	10,348
Total available-for-sale investments	$ 24,702	$ (68)	$ 24,634
December 31, 2003			
U.S. government investments:			
Maturing within 1 year	$ 7,578	$ 8	$ 7,586
Maturing between 1 and 2 years	6,251	19	6,270
Total government investments	13,829	27	13,856
Corporate debt investments:			
Maturing within 1 year	14,175	2	14,177
Maturing between 1 and 2 years	6,022	(3)	6,019
Total corporate investments	20,197	(1)	20,196
Total available-for-sale investments	$ 34,026	$ 26	$ 34,052

Gross unrealized losses on available-for-sale securities at December 31, 2004 and 2003 were not material.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation is calculated using the straight-line method based on the estimated useful lives of the related assets (generally three to five years). For leasehold improvements, amortization is calculated using the straight-line method based on the shorter of the useful life or the lease term.

Impairment of Long-Lived Assets

Effective January 1, 2002, the Company adopted FAS No. 144 “Accounting for the Impairment or Disposal of Long-Lived Assets” (“FAS 144”). FAS No. 144 addresses the financial accounting and reporting for the impairment or disposal of long-lived assets and supercedes FAS No. 121 “Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to Be Disposed Of.” The primary objectives of FAS No. 144 are to develop one accounting model based on the framework established in FAS No. 121 for long-lived assets to be disposed of by sale, and to address significant implementation issues. The adoption of FAS No. 144 did not have an impact on the Company’s consolidated financial statements.

Goodwill and Other Intangible Assets

Goodwill represents the difference between the purchase price and the fair value of the net assets acquired in connection with our Gendaq acquisition on July 4, 2001. In July 2001, the Financial Accounting Standards Board issued FAS No. 142, "Goodwill and Other Intangible Assets." FAS No. 142 is effective for fiscal years beginning after December 15, 2001, and includes requirements to test goodwill and indefinite lived intangible assets for impairment, rather than amortizing them. Accordingly, goodwill was not amortized and was reviewed for impairment in accordance with FAS No. 142 as of January 1, 2002 for the transitional impairment test and September 30, 2002 for the annual impairment test. The entire balance of goodwill was written off in September of 2002 as an impairment charge as a result of the annual impairment test (See Note 4 in Notes to Consolidated Financial Statements).

Other intangible assets represents the fair value of patents purchased in connection with the Gendaq acquisition. In accordance with FAS 142, patents were being amortized on a straight-line basis over the estimated useful life of seven years, and were also reviewed for impairment as of September 30, 2002, in accordance with FAS 144. As a result, the unamortized balance of patents was written off in September of 2002 as an impairment charge (See Note 5 in Notes to Consolidated Financial Statements).

Foreign Currency Translation

Sangamo translates the assets and liabilities of its foreign subsidiary stated in local functional currencies to U.S. dollars at the rates of exchange in effect at the end of the period. Revenues and expenses are translated using rates of exchange in effect during the period. Gains and losses from translation of financial statements denominated in foreign currencies, if material, were included as a separate component of other comprehensive income (loss) in the statement of stockholders' equity until closure of the Gendaq facility in September 2002. Subsequently, gains and losses from translation of Gendaq's financial statements are recorded as other income.

The Company records foreign currency transactions at the exchange rate prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currency are retranslated at the exchange rates in effect at the balance sheet date. Foreign currency transaction gains and losses are recorded through profit and loss and gains of $261,000, $298,000 and $435,000 were recorded during 2004, 2003 and 2002, respectively.

Comprehensive Loss

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Comprehensive loss for the years ended December 31, 2004, 2003 and 2002 is included in the statement of stockholders' equity. Comprehensive loss includes all changes in equity during a period from non-owner sources. These items include unrealized gains/ (losses) on investments and foreign currency translation adjustments.

Revenue Recognition

In accordance with Staff Accounting Bulletin No. 104, "Revenue Recognition," revenue from research activities made under strategic partnering agreements is recognized as the services are provided when there is persuasive evidence that an arrangement exists, delivery has occurred, the price is fixed or determinable, and collectibility is reasonably assured. Amounts received in advance under such agreements are deferred until the above criteria are met and the research services are performed. Sangamo's federal government research grants are typically multi-year agreements and provide for the reimbursement of qualified expenses for research and development as defined under the terms of the grant agreement. Revenue under grant agreements is recognized when the related qualified research expenses are incurred. Grant reimbursements are received on a quarterly or monthly basis and are subject to the issuing agency's right of audit.

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Sangamo recognizes revenue from its Universal GeneTools®agreements when ZFP Transcription Factors ("ZFP TFs") are delivered to the Universal GeneTools® collaborators, persuasive evidence of an agreement exists, there are no unfulfilled obligations, the price is fixed and determinable, and collectibility is reasonably assured. Generally, Sangamo receives partial payments from these collaborations prior to the delivery of ZFP TFs and the recognition of these revenues is deferred until the ZFP TFs are delivered. The risk of ownership has passed to the collaborator and all performance obligations have been satisfied at the time revenue is recognized.

Milestone payments under research, partnering, or licensing agreements are recognized as revenue upon the achievement of mutually agreed upon milestones, provided that (i) the milestone event is substantive and its achievement is not reasonably assured at the inception of the agreement, and (ii) there are no performance obligations associated with the milestone payment.

In accordance with Emerging Issues Task Force Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables," revenue arrangements entered into after June 15, 2003, that include multiple deliverables, are divided into separate units of accounting if the deliverables meet certain criteria, including whether the fair value of the delivered items can be determined and whether there is evidence of fair value of the undelivered items. In addition, the consideration is allocated among the separate units of accounting based on their fair values, and the applicable revenue recognition criteria are considered separately for each of the separate units of accounting.

Research and Development Expenses

Research and development expenses consist of costs incurred for Company-sponsored as well as collaborative research and development activities. These costs include direct and research-related overhead expenses, which include salaries and other personnel-related expenses, facility costs, supplies and depreciation of facilities and laboratory equipment, as well as the cost of funding research at universities and other research institutions, and are expensed as incurred. Costs to acquire technologies that are utilized in research and development and that have no alternative future use are expensed as incurred.

Stock-Based Compensation

Sangamo accounts for employee and director stock options using the intrinsic value method in accordance with Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees" ("APB 25") and has adopted the disclosure-only alternative of FAS No. 123, "Accounting for Stock-Based Compensation." Stock options granted to non-employees, including Scientific Advisory Board Members, are accounted for in accordance with Emerging Issues Task Force Issue No. 96-18, "Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services," which requires the value of such options to be measured and compensation expenses to be recorded as they vest over a performance period. The fair value of such options is determined using the Black-Scholes model. The following table illustrates, pursuant to FAS No. 123, as amended by FAS No. 148, "Accounting for Stock-Based Compensation — Transition and Disclosure," the effect on net loss and related

net loss per share had compensation cost for stock-based compensation plans been determined based upon the fair value method prescribed under FAS No. 123:

	Year Ended December 31,		
	2004	2003	2002
	(In thousands, except per share data)		
Net loss:			
As reported	$ (13,818)	$ (10,433)	$ (29,764)
Add: stock-based compensation expense included in reported net loss	663	567	1,499
Less: stock-based compensation expense determined under the fair value based method	(4,297)	(2,515)	(2,909)
Pro forma net loss	$ (17,452)	$ (12,381)	$ (31,174)
Basic and diluted net loss per share:			
As reported	$ (0.55)	$ (0.42)	$ (1.22)
Pro forma	$ (0.70)	$ (0.50)	$ (1.27)

The above pro forma effect may not be representative of that to be expected in future years, due to subsequent years including additional grants and related vesting. The fair value for all options granted in 2004, 2003, and 2002 was estimated at the date of grant using the Black-Scholes method with the following weighted-average assumptions:

	Year Ended December 31,		
	2004	2003	2002
Risk-free interest rate	3.5%	3.1%	3.8%
Expected life of option	5 yrs	5 yrs	5 yrs
Expected dividend yield of stock	0%	0%	0%
Expected volatility	1.08	1.08	1.0

The Company amortizes deferred compensation pertaining to employee stock options over the respective employees' vesting period using the graded vesting method.

Income Taxes

Sangamo accounts for income taxes as required by FAS No. 109, "Accounting for Income Taxes." Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some or all of the deferred tax assets may not be realized.

Net Loss Per Share

Basic and diluted net loss per share information for all periods is presented under the requirements of FAS No. 128, "Earnings per Share." Basic net loss per share has been computed using the weighted-average number of shares of common stock outstanding during the period, less shares subject to repurchase. The

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

following table presents the calculation of historical basic and diluted net loss per common share (in thousands, except per share data):

	Year Ended December 31,		
	2004	2003	2002
Net loss	$ (13,818)	$ (10,433)	$ (29,764)
Basic and diluted:			
Weighted-average shares of common stock outstanding	25,126	24,816	24,577
Less: weighted-average shares subject to repurchase	—	(5)	(84)
Shares used in computing basic and diluted net loss per share	25,126	24,811	24,493
Basic and diluted net loss per share	$ (0.55)	$ (0.42)	$ (1.22)

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS No. 123R "Share Based Payment." This statement is a revision to SFAS 123 and supersedes Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees," and amends FASB Statement No. 95, "Statement of Cash Flows." This statement requires a public entity to expense the cost of employee services received in exchange for an award of equity instruments. This statement also provides guidance on valuing and expensing these awards, as well as disclosure requirements of these equity arrangements. This statement is effective for the first interim reporting period that begins after June 15, 2005.

SFAS 123R permits public companies to choose between the following two adoption methods:

1. A "modified prospective" method in which compensation cost is recognized beginning with the effective date (a) based on the requirements of SFAS 123R for all share-based payments granted after the effective date and (b) based on the requirements of Statement 123 for all awards granted to employees prior to the effective date of SFAS 123R that remain unvested on the effective date, or

2. A "modified retrospective" method which includes the requirements of the modified prospective method described above, but also permits entities to restate based on the amounts previously recognized under SFAS 123 for purposes of pro forma disclosures either (a) all prior periods presented or (b) prior interim periods of the year of adoption.

As permitted by SFAS 123, we currently account for share-based payments to employees using APB Opinion 25's intrinsic value method and, as such, we generally recognize no compensation cost for employee stock options. The impact of the adoption of SFAS 123R cannot be predicted at this time because it will be depend on levels of share-based payments granted in the future. However, valuation of employee stock options under SFAS 123R is similar to SFAS 123, with minor exceptions. For information about what our reported results of operations and earnings per share would have been had we adopted SFAS 123, please see the discussion under the heading "Stock Based Compensation" in Note 1 to our Consolidated Financial Statements. Accordingly, the adoption of SFAS 123R's fair value method will have a significant impact on our results of operations, although it will have no impact on our overall financial position. Due to timing of the release of SFAS 123R, we have not yet completed the analysis of the ultimate impact that this new pronouncement will have on the results of operations, nor the method of adoption for this new standard.

2. Major Customers, Partnerships and Strategic Alliances

In January 2000, we announced a therapeutic product development collaboration with Edwards Lifesciences Corporation. Under the agreement, we have licensed to Edwards, on a worldwide, exclusive basis,

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

ZFP Therapeutics for use in the activation of VEGFs and VEGF receptors in ischemic cardiovascular and vascular diseases. Edwards purchased a $5.0 million note that converted, together with accrued interest, into 333,333 shares of common stock at the time of our initial public offering (IPO) at the IPO price. In March 2000, Edwards purchased a $7.5 million convertible note in exchange for a right of first refusal for three years to negotiate a license for additional ZFP Therapeutics in cardiovascular and peripheral vascular diseases. That right of first refusal was not exercised and terminated in March 2003. Together with accrued interest, this note converted into common stock at the time of our initial public offering at the IPO price. Through 2001, we received $2.0 million in research funding from Edwards and a $1.4 million milestone payment for delivery of a lead ZFP Therapeutic product candidate. In November 2002, Edwards signed an amendment to the original agreement and agreed to provide up to $3.5 million in research and development funding, including $2.95 million for research and development activities performed in 2002 and 2003. The filing of the IND for PAD in 2004, and the achievement of other research-related milestones in 2003, triggered a total of $1.0 million in milestone payments from Edwards Lifesciences in the first quarter of 2004. We have retained all rights to use our technology for therapeutic applications of VEGF activation outside of ischemic cardiovascular and vascular diseases, including use in wound healing and neurological disorders. Revenues attributable to milestone achievement and collaborative research and development performed under the Edwards agreement were $615,000, $1.5 million and $2.0 million million for 2004, 2003 and 2002, respectively. Related costs and expenses incurred for services performed under the Edwards agreement were $1.4 million and $1.9 million and for 2003 and 2002, respectively. There were no costs or expenses incurred under the Edwards agreement during 2004. We have no future commitments related to these agreements. Revenues attributable to milestone achievement and collaborative research and development performed under the Edwards agreement were 47%, 59% and 45% for 2004, 2003 and 2002, respectively, of total revenues earned by Sangamo. As of December 31, 2003 accounts receivable from Edwards represented 76% of our total accounts receivable balance. There were no amounts owed the Company under the Edwards agreements as of December 31, 2004.

Under the Sangamo-Edwards agreement, we were responsible for advancing product candidates into preclinical animal testing. Edwards had responsibility for preclinical development, regulatory affairs, clinical development, and the sales and marketing of ZFP Therapeutic products developed under the agreement. Sangamo may receive milestone payments in connection with the development and commercialization of the first product under this agreement and may also receive royalties on product sales. As part of the November 2002 amendment to our original agreement, Edwards Lifesciences also entered into a joint collaboration with us to evaluate ZFP TFs for the regulation of a second therapeutic gene target, phospholamban (PLN), for the treatment of congestive heart failure. Under the amended agreement, Sangamo granted Edwards a right of first refusal to Sangamo's ZFP TFs for the regulation of PLN. This right of first refusal terminated on June 30, 2004. On August 14, 2003 Edwards and Sangamo entered into a Third Amendment to the original license agreement. Under this amendment, Sangamo received payment for research and development milestones associated with the VEGF and PLN programs.

There is no assurance that the companies will achieve the development and commercialization milestones anticipated in these agreements. Edwards has the right to terminate the agreement at any time upon 90 days written notice. In the event of termination, we retain all payments previously received as well as the right to develop and commercialize all related products.

In January 2002, we announced an agreement with Medarex, Inc. to develop cell lines to enhance the production yields of monoclonal antibodies. Under this agreement, Medarex provided Sangamo with research funding in 2002 and 2003, and Sangamo will be entitled to milestone payments and, potentially, royalties on sales of Medarex antibodies manufactured with our ZFP TF technology. Medarex will receive a non-exclusive license to the resulting technology, and Sangamo will have the ability to utilize the technology in collaborations with other partners. Revenues attributable to collaborative research and development performed under the Medarex agreements were $600,000 for 2003 and 2002 respectively. There were no revenues

in connection with the Medarex agreements during 2004. Related costs and expenses associated with collaborative research and development performed under the Medarex agreements were $242,000 and $273,000 in 2003 and 2002, respectively. There were no costs or expenses incurred under the Medarex agreements during 2004. During 2003 and 2002, the revenues attributable to collaborative research and development performed under the Medarex agreements were 23% and 14%, respectively, of total revenues earned by Sangamo.

In December 2004, we entered into a research collaboration agreement with Pfizer Inc to develop enhanced cell lines for protein pharmaceutical production. Under the terms of the agreement, Pfizer is funding research at Sangamo and Sangamo will provide our proprietary ZFP technology for Pfizer to assess its feasibility for use in mammalian cell-based protein production. We will generate novel cell lines and vector systems for enhanced protein production as well as novel technology for rapid creation of new production cell lines. Pursuant to this agreement, there are no milestone or royalty payments and Pfizer has no downstream commercial rights related to any results that may be obtained from the collaboration. Pursuant to the agreement, we may receive funding of $950,000. Revenues attributable to collaborative research and development performed under the Pfizer agreement were $42,000 during 2004. There were no costs or expenses incurred under the Pfizer agreement during 2004. As of December 31, 2004 accounts receivable from Pfizer represented over 88% of our total accounts receivable balance.

During the third quarter of 2004, the Company entered into a license agreement with the University of Utah (Utah) whereby the Company was granted a worldwide exclusive license to technology and patents for the use of zinc finger nucleases for targeted genomic cleavage, mutagenesis and gene targeting in all fields of use except plants. Pursuant to the agreement, the Company has paid a license fee of 25,000 shares of unregistered Sangamo common stock, valued at $106,250, which was recorded as a research and development expense. Additionally, the Company must pay an annual minimum royalty of $20,000, is obligated to make milestone payments upon the issuance of certain patents and upon the initiation of certain phases of clinical development, and will pay royalties on any product sales during the term of the agreement. To date, the Company has not made any milestone payments under the agreement.

3. Acquisition of Gendaq Limited

On July 4, 2001, we completed our acquisition of Gendaq Limited, a privately held biotechnology company located in the United Kingdom. We issued 2,124,638 shares of common stock in exchange for 100% of the outstanding shares of Gendaq's common stock. We also reserved a total of 125,366 shares for issuance upon exercise of outstanding Gendaq stock options, which were assumed in the transaction. Gendaq had a research and development organization with a focus and research activities similar to ours. In February 2002, we made the decision to begin consolidation of our Gendaq operations from the United Kingdom to our Richmond, California headquarters. The decision followed a post-acquisition review that was initiated in October 2001 where we evaluated technology, personnel, costs, and various alternatives to maximize the synergy between Sangamo and Gendaq. As this review was initiated after the acquisition was completed, and the final decision to consolidate was not made until February 2002, the decision had no impact on our accounting for the acquisition reported in 2001. The Gendaq facility was closed September 30, 2002.

4. Goodwill

During the year ended December 31, 2002, in accordance with the provisions of FAS No. 142 (see Note 1), the Company performed the required two-step annual impairment test of goodwill. In the first step of the analysis, after comparing the carrying value of the Company to its fair value, it was determined that goodwill recorded by the Company was impaired. After the second step of comparing the implied fair value of the goodwill to its carrying value, the Company recognized an impairment loss of $15.3 million, representing the entire capitalized balance of goodwill in the third quarter of 2002.

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The fair value of the Company was determined using the income approach. The income approach focuses on the income-producing capability of an asset, measuring the current value of the asset by calculating the present value of its future economic benefits such as cash earnings, cost savings, tax deductions, and proceeds from disposition. Value indications are developed by discounting expected cash flows to their present value at a rate of return that incorporates the risk-free rate for the use of funds, the expected rate of inflation, current equity market conditions in the United States, increased biotechnology sector volatility, general equity market forecasts and business and operational assumptions specific to Sangamo.

5. Intangible Assets

Statement No. 142 requires that if an impairment test of goodwill is required, the fair values of all assets and liabilities should be reflected in the carrying value of the company prior to the completion of the goodwill impairment test. In determining these fair values, the Company's long-lived assets were reviewed for impairment in accordance with FAS No. 144 by comparing the undiscounted cash flows associated with the intangible assets to their carrying value to indicate whether such assets are recoverable. If it is determined that an asset is not recoverable, FAS No. 144 directs that an impairment loss should be recognized based on the excess of its carrying value over its fair value. Based upon the results of this review, management has concluded that operational adjustments, including, but not limited to, the post-acquisition review and rationalization of Gendaq, has rendered the carrying amount of patents to be not recoverable. After comparing the carrying value of patents to their fair value, the Company recognized an impairment loss of $2.8 million representing the entire unamortized balance of patents. Management assessed all other assets as being recoverable.

6. Property and Equipment

Property and equipment consist of the following:

	December 31,	
	2004	2003
	(In thousands)	
Laboratory equipment	$ 1,728	$ 1,714
Furniture and fixtures	725	716
Leasehold improvements	1,658	1,658
	4,111	4,088
Less accumulated depreciation	(3,793)	(3,182)
	$ 318	$ 906

7. Commitments

Sangamo occupies office and laboratory space under operating leases in Richmond, California that expire in August 2014. License obligations consist of ongoing license maintenance fees and royalties due from sales of ZFP TFs. Consolidated rent expense for 2004, 2003 and 2002 was $620,000, $620,000, and $615,000,

respectively. Future minimum payments under contractual obligations and commercial commitments at December 31, 2004 consist of the following (in thousands):

Fiscal Year:	Operating Lease	License Agreements
2005	$ 423	$ 315
2006	434	—
2007	445	1,121
2008	456	—
2009	467	—
Thereafter	2,338	—
Total minimum payments	$ 4,563	$ 1,436

8. Stockholders' Equity

Convertible Preferred Stock

All outstanding convertible preferred stock converted into common stock upon consummation of the Company's initial public offering in April 2000. The Company has 5,000,000 preferred shares authorized, which may be issued at the Board's discretion.

Common Stock

At December 31, 2004, the Company had no outstanding common stock subject to the company's contractual right of repurchase.

Warrants

Warrants to purchase 74,570 shares of common stock were outstanding at an exercise price of $1.50 per share, and were exercisable through October 2002. The warrants to purchase common stock were issued in connection with a 1997 bridge loan transaction. Sangamo had reserved common stock for issuance upon exercise of the warrants. 50,728 of the warrants were exercised before expiration in 2002. As of December 31, 2004, there were no warrants outstanding.

Stock Option Plan

Sangamo's 2004 Stock Option Plan (the "2004 Option Plan"), which supersedes the 2000 Stock Option Plan, provides for the issuance of common stock and grants of options for common stock to employees, officers, directors and consultants. The exercise price per share will be no less than 85 percent of the fair value per share of common stock on the option grant date, and the option term will not exceed ten years. If the person to whom the option is granted is a 10 percent stockholder, and the option granted qualifies as an Incentive Stock Option Grant, then the exercise price per share will not be less than 110 percent of the fair value per share of common stock on the option grant date, and the option term will not exceed five years. Options granted under the 2004 Option Plan generally vest over four years at a rate of 25 percent one year from the grant date and one thirty-sixth per month thereafter and expire ten years after the grant, or earlier upon employment termination. Options granted pursuant to the 2004 Option Plan may be exercised prior to vesting, with the related shares subject to Sangamo's right to repurchase the shares that have not vested at the issue price if the option holder terminates employment. The right of repurchase lapses over the original option vesting period, as described above. A total of 6.5 million shares are reserved for issuance pursuant to the 2004 Option Plan. The number of shares authorized for issuance automatically increases on the first trading day of the fiscal year by an amount equal to 3.5 percent of the total number of shares of our common stock outstanding on the last trading day of the preceding fiscal year.

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A summary of Sangamo's stock option activity follows:

	Shares Available for Grant of Options	Options Outstanding	
		Number of Shares	Weighted-Average Exercise per Share Price
Balance at December 31, 2001	1,828,295	2,374,483	$ 6.33
Additional shares authorized	856,872	—	—
Options granted	(535,750)	535,750	$ 6.31
Options exercised	—	(95,946)	$ 0.31
Options canceled	253,554	(253,554)	$ 9.14
Balance at December 31, 2002	2,402,971	2,560,733	$ 6.26
Additional shares authorized	865,925	—	—
Options granted	(652,700)	652,700	$ 4.05
Options exercised	—	(72,495)	$ 0.19
Shares repurchased	917	—	$ 0.23
Options canceled	179,686	(179,686)	$ 7.99
Balance at December 31, 2003	2,796,799	2,961,252	$ 5.81
Additional shares authorized	873,398	—	—
Options granted	(1,001,050)	1,001,050	$ 4.74
Options exercised	—	(120,740)	$ 2.44
Options canceled	315,466	(315,466)	$ 6.19
Balance at December 31, 2004	2,984,613	3,526,096	$ 5.59

There were no shares subject to Sangamo's right of repurchase as of December 31, 2004. The weighted-average fair value per share of options granted during 2004, 2003, and 2002 was $4.74, $3.52, and $7.55, respectively.

The following table summarizes information with respect to stock options outstanding at December 31, 2004:

Range of Exercise Price			Options Outstanding	
			Number of Shares	Weighted Average Remaining Contractual Life (In Years)
$ 0.05	-	$ 0.17	607,583	3.29
$ 0.23	-	$ 3.61	592,768	8.17
$ 3.81	-	$ 5.19	858,837	9.31
$ 5.32	-	$ 7.49	734,750	7.24
$ 7.57	-	$14.60	603,658	6.29
$ 14.87	-	$38.00	128,500	6.15
			3,526,096	7.02

As permitted by FAS No. 123, Sangamo accounts for its stock option and stock incentive plans in accordance with APB 25 and recognizes no stock compensation expense for options granted with exercise prices equal to the fair market value of Sangamo's common stock at the date of grant. In 2000 and 1999, Sangamo granted options to employees with exercise prices below the fair value of Sangamo's common stock.

Accordingly, the Company recognized deferred stock compensation of $6.8 million in 2000. Deferred stock compensation is being amortized to expense over the vesting term of the option using the graded vesting method.

In 2004, 2003 and 2002, Sangamo granted 10,000, 10,000, and 6,000, respectively of nonqualified common stock options to consultants at exercise prices that range from $2.42 to $7.57 per share for services rendered. Such options are included in the option tables disclosed above. The options generally vest over four years at a rate of 25 percent one year from the grant date and one thirty-sixth per month thereafter and expire ten years after the grant date. Total nonqualified stock-based compensation expense was $662,000, $388,000 and $301,000 in 2004, 2003 and 2002, respectively. The fair value of these options was determined using the Black-Scholes model and periodic adjustments as the options vest.

Employee Stock Purchase Plan

The Board of Directors adopted the 2000 Employee Stock Purchase Plan in February 2000, effective upon the completion of Sangamo's initial public offering of its common stock. Sangamo reserved a total of 400,000 shares of common stock for issuance under the plan. Eligible employees may purchase common stock at 85 percent of the lesser of the fair market value of Sangamo's common stock on the first day of the applicable two-year offering period or the last day of the applicable six-month purchase period. The reserve for shares available under the plan will automatically increase on the first trading day of the second fiscal quarter each year, beginning in 2001, by an amount equal to 1 percent of the total number of outstanding shares of our common stock on the last trading day of the immediately preceding first fiscal quarter.

Common Stock

At December 31, 2004, the Company has reserved shares of common stock for future issuance as follows:

2004 Stock Option Plan	6,510,709
2000 Employee Stock Purchase Plan	987,764
	7,498,473

9. Comprehensive Loss

Comprehensive loss was as follows (in thousands):

	Year Ended December 31,		
	2004	2003	2002
Net loss	$ (13,818)	$ (10,433)	$ (29,764)
Unrealized (loss) on investments	(93)	(81)	(158)
Change in foreign currency translation adjustment	—	—	219
Other than temporary loss on investments	71	6	—
Reclassification of loss on foreign currency translation adjustment	—	—	(367)
Comprehensive loss	$ (13,840)	$ (10,508)	$ (30,070)

10. Loans to Officers

On May 10, 2002, Sangamo advanced its former Chief Scientific Officer a $250,000 housing loan under a Secured Promissory Note. The note bore interest at six percent per annum and was being forgiven 25 percent

annually beginning in 2003. The entire amount of the housing loan and accrued interest was forgiven and a related charge of $263,000 was recorded during 2003.

11. Income Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets are as follows:

	December 31,	
	2004	2003
Deferred tax assets:		
Net operating loss carryforwards	$ 18,363	$ 12,161
Research and development tax credit carryforwards	2,774	1,697
Capitalized research	1,591	1,767
Other	1,288	581
	24,016	16,206
Valuation allowance	(24,016)	(16,206)
Net deferred tax assets	$ —	$ —

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the net deferred tax assets have been fully offset by a valuation allowance. There is no provision for income taxes because we have incurred losses. The valuation allowance increased by $7,810 and $4,556 for the years ended December 31, 2004 and 2003, respectively. As of December 31, 2004, Sangamo had net operating loss carryforwards for federal income tax purposes of approximately $50.2 million, which expire in the years 2010 through 2024. The Company also has state net operating loss carryforwards of approximately $21.5 million, which expire in the years 2005 through 2014. The Company also has federal and state research tax credit carryforwards of $1.6 million and $1.6 million, respectively. The federal research credits will begin to expire in the year 2018 through 2024 and the state research credits have no expiration date. Use of the net operating loss may be subject to substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code and similar state provisions. The annual limitation could result in the expiration of the net operating loss before use.

12. Accounts Payable and Accrued Liabilities

Accounts payable and accrued liabilities consist of the following:

	December 31,	
	2004	2003
Accounts payable	$ 404	$ 139
Accrued professional fees	383	318
Accrued research and collaboration expense	65	154
Accrued severance	—	153
Other	54	51
Total accounts payable and accrued liabilities	$ 906	$ 815

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

13. Quarterly Financial Data (Unaudited)

The following table sets forth certain unaudited quarterly financial data for the eight quarters ended December 31, 2004. The unaudited information set forth below has been prepared on the same basis as the audited information and includes all adjustments necessary to present fairly the information set forth herein. The operating results for any quarter are not indicative of results for any future period. All data is in thousands except per common share data.

	Fiscal Year 2004				Fiscal Year 2003			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Revenues	$ 811(2)	$ 132	$ 172	$ 200	$ 551	$ 518	$ 507	$ 1,003(3)
Expenses	$ 3,990	$ 3,529	$ 4,847	$ 3,600	$ 3,622	$ 4,221	$ 3,473	$ 3,032
Net loss	$ (2,942)	$ (3,262)	$ (4,571)	$ (3,043)	$ (2,895)	$ (3,274)	$ (2,584)	$ (1,680)
Net loss per share(1)	$ (0.12)	$ (0.13)	$ (0.18)	$ (0.12)	$ (0.12)	$ (0.13)	$ (0.10)	$ (0.07)

(1) Net loss per share is calculated based on the weighted average number of common shares outstanding during the quarter less repurchase shares in 2003.

(2) Q1 2004 revenues include a $600,000 milestone payment that was received upon the filing of the IND for PAD.

(3) Q4 2003 revenues include a $400,000 milestone payment that was received upon the completion and delivery to Edwards of research vector constructs and associated supporting data.

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

None.

Item 9A. ***Controls and Procedures***

CONTROLS AND PROCEDURES

We have performed an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer (CEO) and Principal Financial Officer (PFO) of the effectiveness of our disclosure controls and procedures, as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the Exchange Act). Based on that evaluation, our management, including our CEO and PFO, concluded that our disclosure controls and procedures were effective as of December 31, 2004 to ensure that information required to be disclosed by us in the reports filed or submitted by us under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. There were no significant changes in our internal control over financial reporting during the three months ended December 31, 2004 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Internal control over financial reporting refers to the process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

(1) Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;

(2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorization of our management and directors; and

(3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk. Management is responsible for establishing and maintaining adequate internal control over financial reporting for the company.

Management has used the framework set forth in the report entitled *Internal Control — Integrated Framework* published by the Committee of Sponsoring Organizations of the Treadway Commission, known as COSO, to evaluate the effectiveness of the Company's internal control over financial reporting. Management has concluded that our internal control over financial reporting was effective as of December 31, 2004. Ernst & Young LLP has issued an attestation report on management's assessment of our internal control over financial reporting.

There has been no change in our internal controls over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

Item 9B. ***Other Information***

Not applicable.

PART III

Certain information required by Part III is omitted from this Report on Form 10-K since we intend to file our definitive Proxy Statement for our next Annual Meeting of Stockholders, pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended (the "2005 Proxy Statement"), no later than April 29, 2005, and certain information to be included in the Proxy Statement is incorporated herein by reference.

Item 10. *Directors and Executive Officers of the Registrant*

The information required by this item concerning our directors, executive officers, Section 16 compliance and code of ethics is incorporated by reference to the information set forth in the sections titled "Election of Directors," "Management," "Section 16(a) Beneficial Ownership Reporting Compliance" and "Code of Ethics" in our 2005 Proxy Statement.

Item 11. *Executive Compensation*

The information required by this item regarding executive compensation is incorporated by reference to the information set forth in the sections titled "Executive Compensation" in our 2005 Proxy Statement.

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

The information required by this item regarding security ownership of certain beneficial owners and management is incorporated by reference to the information set forth in the section titled "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plans" in our 2005 Proxy Statement.

Item 13. *Certain Relationships and Related Transactions*

The information required by this item regarding certain relationships and related transactions is incorporated by reference to the information set forth in the section titled "Certain Relationships and Related Transactions" in our 2005 Proxy Statement.

Item 14. *Principal Accountant Fees and Services*

The information required by this item regarding principal auditor fees and services is incorporated by reference to the information set forth in the section titled "Principal Auditor Fees and Services" in our 2005 Proxy Statement.

PART IV

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

(a) The following documents are filed as part of this report:

1. Financial Statements — See Index to Consolidated Financial Statements in Item 8 of the report.

2. Financial Statement Schedules — None.

3. See Index to Exhibits.

(c) See the Index of Exhibits

(d) See the Financial Statements beginning on page 45 of this Form 10-K

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 23, 2005.

SANGAMO BIOSCIENCES, INC.

By: /s/ EDWARD O. LANPHIER II

Edward O. Lanphier II
President, Chief Executive Officer and Director

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

Signature	Title	Date
/s/ EDWARD O. LANPHIER II Edward O. Lanphier II	President, Chief Executive Officer and Director (Principal Executive Officer)	February 23, 2005
/s/ GREG S. ZANTE Greg S. Zante	Senior Director, Finance and Administration (Principal Financial and Accounting Officer)	February 23, 2005
/s/ WILLIAM G. GERBER, M.D. William G. Gerber, M.D.	Director	February 23, 2005
/s/ JON E. M. JACOBY Jon E. M. Jacoby	Director	February 23, 2005
/s/ JOHN W. LARSON John W. Larson	Director	February 23, 2005
/s/ WILLIAM J. RUTTER, PH.D. William J. Rutter, Ph.D.	Director	February 23, 2005
/s/ MICHAEL C. WOOD Michael C. Wood	Director	February 23, 2005

Index to Exhibits

Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed March 31, 2000).
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed March 31, 2000).
4.1	Form of Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.11 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed March 31, 2000).
10.1†	1995 Stock Option Plan (incorporated by reference to Exhibit 10.16 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed March 14, 2000.
10.2^	2000 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed February 24, 2000).
10.3^	2000 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed February 24, 2000).
10.4	Form of Indemnification Agreement entered into between Sangamo and each of its directors and executive officers (incorporated by reference to Exhibit 10.4 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed February 24, 2000).
10.5†	License Agreement, between Sangamo and Baxter Healthcare Corporation, dated January 11, 2000 (incorporated by reference to Exhibit 10.7 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed February 24, 2000).
10.6†	Sublicense Agreement, by and between Sangamo and Johnson & Johnson, dated May 9, 1996 (incorporated by reference to Exhibit 10.8 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed February 24, 2000).
10.7†	Second Amendment to License Agreement between Sangamo and Edwards Lifesciences LLC (formerly Baxter Healthcare Corporation), dated November 14, 2002 (incorporated by reference to the Company's Annual Report on Form 10-K, filed March 27, 2003).
10.8†	Patent License Agreement between Sangamo and Massachusetts Institute of Technology dated May 9, 1996, (incorporated by reference to Exhibit 10.12 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed March 14, 2000).
10.9†	License Agreement between Sangamo and the Johns Hopkins University dated July 16, 1998, as amended (incorporated by reference to Exhibit 10.13 to the Company's Amendment No. 2 to the Registration Statement on Form S-1/A (Registration No. 333-30134) filed March 14, 2000).
10.10	First Amendment to Research Funding Agreement between Sangamo and Edwards Lifesciences LLC (formerly Baxter Healthcare Corporation), dated November 14, 2002 (incorporated by reference to the Company's Annual Report on Form 10-K, filed March 27, 2003).
10.11^	Employment Agreement, between Sangamo and Edward O. Lanphier II, dated June 1, 1997 (incorporated by reference to Exhibit 10.15 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed March 14, 2000).
10.12	Research Funding Agreement, by and between Sangamo and Edwards Lifesciences LLC (formerly Baxter Healthcare Corporation), dated January 11, 2000 (incorporated by reference to Exhibit 10.17 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed March 14, 2000).
10.13	License Agreement by and between The Scripps Research Institute and Sangamo, dated March 14, 2000 (incorporated by reference to Exhibit 10.19 to the Company's Registration Statement on Form S-1/A (Registration No. 333-30134) filed April 5, 2000).
10.14†	Third Amendment to Research Funding Agreement between Sangamo and Edwards Lifesciences LLC (formerly Baxter Healthcare Corporation), dated August 14, 2003 (incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K/A, filed April 1, 2004).

Exhibit Number	Description of Document
10.15^	Separation Agreement and Release between Sangamo and Carl Pabo, Ph.D., dated June 20, 2003 (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K/A filed April 27, 2004).
10.16^	Separation Agreement and Release between Sangamo and Janet Nibel, dated August 13, 2003 (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K/A filed April 27, 2004).
10.17^	Separation Agreement and Release between Sangamo and Peter Bluford, dated October 29, 2004 (incorporated by reference to Exhibit 99.1 to the Company's Form 8-K filed November 4, 2004).
10.18^	2004 Stock Incentive Plan (incorporated by reference to Appendix C of the Company's Definitive Proxy Statement on Schedule 14A filed April 29, 2004).
10.19	Triple Net Laboratory Lease, between Sangamo and Point Richmond R&D Associates II, LLC, dated May 23, 1997 (incorporated by reference to Sangamo's Registration Statement on Form S-1 (Reg. No. 333-30314), as amended.
10.20	First Amendment to Triple Net Laboratory Lease, between Sangamo and Point Richmond R&D Associates II, LLC, dated March 12, 2004.
21.1	Subsidiaries of the Company (incorporated by reference to Exhibit 21.1 to the Company's Annual Report on Form 10-K, filed March 27, 2003).
23.1	Consent of Independent Registered Public Accounting Firm.
31.1	Rule 13a-14(a) Certification of Chief Executive Officer.
31.2	Rule 13a-14(a) Certification of Principal Financial Officer.
32.1	Certification Pursuant to 18 U.S.C. Section 1350.

† Confidential treatment has been granted for certain information contained in this document pursuant to an order of the Securities and Exchange Commission. Such information has been omitted and filed separately with the Securities and Exchange Commission.

^ Indicates management contract or compensatory plan or arrangement.

Exhibit 10.20

FIRST AMENDMENT TO LEASE

THIS FIRST AMENDMENT TO LEASE ("First Amendment") is entered into as of March 12, 2004 (the "Effective Date"), by and between POINT RICHMOND R&D ASSOCIATES II, LLC, a California limited liability company, successor-in-interest to Point Richmond R&D II, an LLC ("Landlord"), and SANGAMO BIOSCIENCES, INC., a Delaware corporation ("Tenant"), with reference to the following facts:

A. Landlord and Tenant entered into that certain Triple Net Laboratory Lease dated May 23, 1997, together with an Addendum thereto dated May 28, 1997 (collectively, the "Original Lease"), pursuant to which Landlord leased to Tenant certain premises consisting of approximately 9,770 square feet of rentable area (the "Premises") in the building located at 501 Canal Boulevard, Point Richmond, California (the "Building"). Thereafter, the Original Lease was amended by (i) the letter agreement dated June 15, 1999 (the "June 15 Letter"), pursuant to which, among other things, additional space in the Building consisting of approximately 5,009 square feet of rentable area was added to the Premises and the term of the Original Lease was extended to August 31, 2004, (ii) the letter dated April 21, 2000 (the "April 21 Letter"), pursuant to which, among other things, the rentable area of the Premises was amended, and (iii) the letter agreement dated November 3, 2000 (the "November 3 Letter"), pursuant to which additional space in the Building consisting of approximately 7,000 square feet of rentable area was added to the Premises (the Original Lease, together with the June 15 Letter, the April 21 Letter and the November 3 Letter, are referred to collectively herein as the "Lease").

B. The Lease by its terms is scheduled to expire on August 31, 2004, and the parties desire to extend the term of the Lease and amend the Lease in certain other respects, all on the following terms and conditions.

NOW, THEREFORE, in consideration of the foregoing, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. Incorporation of Recitals and Defined Terms. Recitals A and B above are hereby incorporated herein. Capitalized terms which are not otherwise defined in this First Amendment shall have the meanings set forth in the Lease.

2. Confirmation of Premises; Percentage Share. Landlord and Tenant hereby confirm that, as of the Effective Date (a) the Premises contain approximately 21,860 square feet of rentable area and consist of Suites A, A-2 and B in the Building, as shown on Exhibit A attached hereto; and (b) the percentage to be used by the parties for purposes of calculating Tenant's Pro Rata Share of Operating Expenses is 26.77%.

3. Condition of Premises; Parking. As of the Effective Date, Tenant is in possession of the Premises and, provided that there is no material change in the condition of the Premises between the Effective Date and the commencement of the Extended Term (defined below) (i.e., there has been no material damage or destruction to the Premises), Tenant agrees to accept the Premises as of the commencement of the Extended Term in their "as is" condition. During the

Extended Term, Tenant shall continue to have the use of 76 unreserved off-street parking spaces, at no cost to Tenant.

4. Extension of Term.

(a) Extended Term. The term of the Lease is hereby extended for a period of 120 months and shall expire on August 31, 2014 (the "Extended Expiration Date"), unless sooner terminated or extended in accordance with the terms of the Lease (as amended hereby). That portion of the term of the Lease commencing as of September 1, 2004 and ending on the Extended Expiration Date shall be referred to herein as the "Extended Term."

(b) Accelerated Expiration. Tenant shall have the one time right ("Acceleration Option") to accelerate the Extended Expiration Date to August 31, 2011 (the "Accelerated Expiration Date"), with respect to the Premises only (specifically excluding any Refusal Space leased by Tenant pursuant to Section 9 below), if (i) Tenant is not in default under the Lease (beyond the expiration of all applicable cure and notice periods) as of the date Tenant provides Landlord with Tenant's notice of acceleration (the "Acceleration Notice"), and (ii) Tenant delivers the Acceleration Notice no later than September 1, 2010. If Tenant exercises the Acceleration Option, (A) Tenant shall remain liable for all Base Monthly Rent, Tenant's Pro Rata Share of Operating Expenses, and other sums accrued and due under the Lease up to and including the Accelerated Expiration Date, even though billings for any such items may occur subsequent to the Accelerated Expiration Date, and (B) Landlord shall remain liable for the reconciliation of Operating Expenses for periods prior to the Accelerated Expiration Date in accordance with the terms of Article 4 of the Lease and the prompt refund to Tenant of any excess Operating Expenses paid by Tenant. Tenant shall not be required to pay an early termination fee or penalty in connection with the Acceleration Option. As of the date Tenant provides Landlord with a timely Acceleration Notice, any unexercised rights or options of Tenant to extend the term of the Lease or to expand the Premises (whether pursuant to any expansion options, rights of first or second refusal, rights of first or second offer, or other similar rights), and any tenant improvement allowance not claimed by Tenant in accordance with the Lease, as amended hereby, as of such date, shall immediately be deemed terminated and no longer available or of any further force or effect.

5. Base Monthly Rent. The schedule of Base Monthly Rent payable with respect to the Premises during the Extended Term is the following:

PERIOD	APPROXIMATE MONTHLY RATE PER SQUARE FOOT	BASE MONTHLY RENT
September 1, 2004 – August 31, 2005	$1.60	$34,976.00
September 1, 2005 – August 31, 2006	$1.64	$35,850.40
September 1, 2006 – August 31, 2007	$1.68	$36,746.66
September 1, 2007 – August 31, 2008	$1.72	$37,665.33

PERIOD	APPROXIMATE MONTHLY RATE PER SQUARE FOOT	BASE MONTHLY RENT
September 1, 2008 – August 31, 2009	$1.77	$38,606.96
September 1, 2009 – August 31, 2010	$1.81	$39,572.13
September 1, 2010 – August 31 , 2011	$1.86	$40,561.44
September 1, 2011 – August 31, 2012	$1.90	$41,575.47
September 1, 2012 – August 31, 2013	$1.95	$42,614.86
September 1, 2013 – August 31, 2014	$2.00	$43,680.23

6. Cap on Tenant's Pro Rata Share of Operating Expenses. During the Extended Term, Tenant shall continue to pay Tenant's Pro Rata Share of Operating Expenses in accordance with the terms of the Lease; provided however, that during the Extended Term, Tenant's Pro Rata Share of Operating Expenses shall not increase by more than 5% per calendar year on a compounding and cumulative basis throughout the Extended Term (e.g. Tenant's Pro Rata Share of Operating Expenses for 2005 shall not exceed 105% of Tenant's Pro Rata Share of Operating Expenses for 2004; Tenant's Pro Rata Share of Operating Expenses for 2006 shall not exceed 105% of the maximum allowable amount of Tenant's Pro Rata Share of Operating Expenses permitted for 2005; etc.), By way of illustration, if Tenant's Pro Rata Share of Operating Expenses for 2004 are $0.60 per rentable square foot per month, then Tenant's Pro Rata Share of Operating Expenses for 2005 shall not exceed $0.63 per rentable square foot per month, and Tenant's Pro Rata Share of Operating Expenses for 2006 shall not exceed $0.6615 per rentable square foot per month. If Tenant exercises the Extension Option(s) provided in Section 8 below, Tenant's Pro Rata Share of Operating Expenses during each Option Term (defined below) shall be subject to the foregoing 5% per annum cap, with the cap on Tenant's Pro Rata Share of Operating Expenses for the first calendar year during each Option Term to be 5% in excess of the maximum allowable amount of Tenant's Pro Rata Share of Operating Expenses permitted for the calendar year immediately preceding the first calendar year of the applicable Option Term; provided, however, Landlord shall have the right, by written notice delivered to Tenant no later than sixty (60) days prior to the commencement date of the applicable Option Term, to designate that the cap on Tenant's Pro Rata Share of Operating Expenses for the first calendar year during such Option Term shall instead be 5% in excess of the actual Tenant's Pro Rata Share of Operating Expenses for the calendar year immediately preceding the first calendar year of such Option Term.

7. Tenant Improvement Allowance.

(a) Landlord agrees to contribute the sum of $43,720.00 per year (collectively, the "Extended Term Allowance") for each year during the Extended Term (i.e. each 12 month period from September 1 through August 31 during the Extended Term) toward Tenant's cost of performing Alterations in the Premises in accordance with the terms and conditions of Section 7.3 of the Lease (the "Extended Term Alterations"). The first annual increment of the Extended Term Allowance shall be available to Tenant, on and after September 1, 2004, and each subsequent annual increment of the Extended Term Allowance shall be available to Tenant on and after each September 1 thereafter through August 31, 2014.

If Tenant does not submit a request for full payment of any annual increment of the Extended Term Allowance to Landlord for any year in which such annual increment of the Extended Term Allowance is available, such unused amount shall be added to the increment of the Extended Term Allowance available to Tenant during the subsequent years. Any portion of the Extended Term Allowance that is not claimed by Tenant prior to August 31, 2014, shall accrue to the sole benefit of Landlord, and Tenant shall not be entitled to any credit, abatement or other concession in connection therewith. The Extended Term Allowance may only be used for hard and/or soft costs in connection with the Extended Term Alterations; and in no event shall the Extended Term Allowance be used for the purchase of equipment, furniture or other items of personal property of Tenant. Tenant shall be responsible for all elements of the design of Tenant's plans for the Extended Term Alterations (including, without limitation, compliance with law, functionality of design and the structural integrity of the design), and Landlord's approval of Tenant's plans therefor shall in no event relieve Tenant of the responsibility for such design.

(b) The Extended Term Allowance shall be paid to Tenant or, at Landlord's option, to the order of the contractor that performed the applicable Extended Term Alterations, within thirty (30) days following receipt by Landlord of receipted bills or invoices covering all labor and materials expended and used in such Extended Term Alterations. Notwithstanding anything herein to the contrary, Landlord shall not be obligated to disburse any portion of the Extended-Term Allowance during the continuance of a default by Tenant under the Lease (beyond the expiration of all applicable cure and notice periods), and Landlord's obligation to disburse shall only resume when and if such default is cured. Landlord and Tenant acknowledge that all Extended Term Alterations shall, without compensation or credit to Tenant, become part of the Premises and the property of Landlord at the time of their installation and shall remain in the Premises, unless, at the time of Landlord's consent to the applicable Extended Term Alterations, Landlord notified Tenant in writing that Landlord would require removal of such Extended Term Alterations from the Premises upon the expiration or earlier termination of the Lease. Landlord shall not be entitled to receive (or deduct from the Extended Term Allowance) any construction management fee or oversight fee in connection with any Extended Term Alterations, Notwithstanding the foregoing, Landlord and Tenant agree that if the property management company (currently Wareham Property Group) provides construction management or administrative services in connection with any Extended Term Alterations, such property management company shall be entitled to a construction management or administration fee in connection with any Extended Term Alterations in accordance with the schedule contained on Exhibit D attached hereto.

8. Extension Options.

(a) Landlord hereby grants Tenant options to extend the Extended Term (each, an "Extension Option") for two (2) additional periods of five (5) years each (each, an "Option Term"), commencing immediately after the expiration of the Extended Term, in the case of the first Extension Option, or the expiration of the first Option Term, in the case of the Second Extension Option. Each Extension Option shall be upon the terms and conditions contained in the Lease (as amended hereby), except that (1) the initial Base Monthly Rent for the Premises during each Option Term shall be equal to 95% of the "fair market rent" for the Premises as of the commencement of the applicable Option Term (i.e., the rate that a willing, comparable, new (i.e., non-renewal), non-equity tenant would pay, and that a willing landlord of

comparable research and development laboratory space in Richmond, California would accept at arms' length), determined in the manner set forth in subparagraph (b) below, and (2) Tenant shall not be entitled to the Extended Term Allowance during the Option Terms. The fair market rent shall not take into account any Alterations constructed by Tenant and paid for by Tenant without any reimbursement from Landlord. Tenant"s election to exercise an Extension Option ("Tenant's Extension Notice") must be given to Landlord in writing not less than twelve (12) full calendar months prior to the expiration of the then current term of the Lease. Notwithstanding anything to the contrary contained herein, an Extension Option exercised by Tenant shall, at Landlord's option, be null and void and of no further force or effect if Tenant is in default under the Lease (beyond the expiration of all applicable cure and notice periods) as of the date of Tenant's Extension Notice for such Extension Option.

(b) If Tenant properly exercises an Extension Option, the initial Base Monthly Rent during the applicable Option Term shall be determined in the following manner. Landlord shall advise Tenant in writing of Landlord's good faith, reasonable determination of the fair market rent (based on the definition of fair market rental set forth above) for the Premises as of the commencement of the applicable Option Term ("Landlord's Fair Market Proposal") no less than two hundred seventy (270) days prior to the commencement of the applicable Option Term, provided Landlord's notification to Tenant of Landlord's Fair Market Proposal shall specifically state that Tenant shall have one hundred twenty (120) days after receipt of Landlord's Fair Market Proposal within which to approve or disapprove Landlord's Fair Market Proposal. If Tenant does not disapprove in writing Landlord's Fair Market Proposal within one hundred ten (110) days after receipt of Landlord's Fair Market Proposal, Landlord shall provide Tenant written notice ("Second Notice") that Tenant's failure to respond within a period of ten (10) days shall be deemed Tenant's approval of Landlord's Fair Market Proposal. Tenant's failure to respond within ten (10) days after Landlord's delivery of the Second Notice shall be deemed to be an approval of Landlord's Fair Market Proposal and Landlord's Fair Market Proposal shall be final and binding upon the parties. In the event Tenant timely disapproves in writing Landlord's Fair Market Proposal, Landlord and Tenant shall attempt in good faith to agree upon the fair market rent within thirty (30) days of Tenant's notice of disapproval. If after such thirty (30) day period, Landlord and Tenant have not agreed in writing as to the fair market rent, the parties shall determine the fair market rent in accordance with the procedure set forth below.

(i) Within ten (10) days after the expiration of such thirty (30) day period, Tenant shall notify Landlord of the name and address of the broker appointed to represent Tenant ("Tenant's Broker"). Tenant's Broker shall be licensed in the State of California, engaged in the brokerage business in the San Francisco-East Bay commercial real estate market for at least the immediately preceding five (5) years, and familiar with the research and development laboratory market in Richmond, California. Within thirty (30) days of the appointment of Tenant's Broker's, Tenant shall advise Landlord in writing of Tenant's Broker's good faith, reasonable determination of the fair market rent for the Premises as of the commencement of the applicable Option Term ("Tenant's Broker's Fair Market Proposal"). Landlord shall have ten (10) days after receipt of Tenant's Broker's Fair Market Proposal within which to approve or disapprove Tenant's Broker's Fair Market Proposal. In the event Landlord disapproves in writing Tenant's Broker's Fair Market Proposal, Landlord and Tenant shall attempt in good faith to agree upon the fair market rent within thirty (30) days of Landlord's notice of disapproval. If after such thirty (30) day period, Landlord and Tenant have not agreed

in writing as to the fair market rent, the parties shall determine the fair market rent in accordance with the procedure set forth below.

(ii) If Landlord and Tenant are unable to agree upon the fair market rent within such second (2nd) thirty (30)-day period, Landlord and Tenant's Broker shall, within ten (10) days thereafter, appoint a third broker meeting the qualifications set forth above with the added qualification that such third broker shall not have previously acted for either Landlord or Tenant. Within thirty (30) days following the appointment of the third broker, the third broker shall deliver his or her written determination of the fair market rent to Landlord and Tenant. If the third broker's determination of fair market rent falls between Landlord's Fair Market Proposal and Tenant's Broker's Fair Market Proposal, the third broker's determination shall be deemed to be the fair market rent for purposes of determining the initial Base Monthly Rent for the Premises for the applicable Option Term. If the third broker's determination falls outside of Landlord's Fair Market Proposal and Tenant's Broker's Fair Market Proposal, whichever of Landlord's Fair Market Proposal and Tenant's Broker's Fair Market Proposal most closely reflects the fair market rent as determined by the third broker shall be deemed to be the fair market rent for purposes of determining the initial Base Monthly Rent for the Premises for the applicable Option Term, and such determination shall be binding on both Landlord and Tenant. Tenant shall pay all costs, commissions and fees of Tenant's Broker in connection with such determination of the fair market rent. The costs and fees of the third broker shall be paid one-half by Landlord and one-half by Tenant.

(c) If the amount of the fair market rent has not been determined in accordance with this Section 8 as of the commencement of the applicable Option Term, then Tenant shall continue to pay the Base Monthly Rent in effect at the expiration of the Extended Term or the expiration of the first Option Term, as applicable, until the amount of the fair market rent is determined. When such determination is made, Tenant shall pay any deficiency to Landlord within thirty (30) days after such determination or Landlord shall credit any overpayment by Tenant against Tenant's next accruing rent under the Lease, as appropriate.

(d) The Base Monthly Rent payable hereunder during each Option Term shall be increased by two percent (2%) on each anniversary of the commencement date of the applicable Option Term.

9. Right of First Refusal.

(a) Commencing on the Effective Date and continuing throughout the Extended Term (the "Right of First Refusal Period"), Tenant shall have the right of first refusal (the "Right of First Refusal") to lease the space known as Suite C and Suite C-2, as shown on Exhibit B attached hereto (each, a "Refusal Space") as and when such Refusal Space becomes available to lease during the Extended Term.

(b) During the Right of First Refusal Period, prior to entering into a letter of intent with a bona fide third party prospective tenant with respect to any Refusal Space, Landlord shall give Tenant a written notice ("Offer Notice"), accompanied by the letter of intent for the applicable Refusal Space which identifies the Refusal Space, the rental rate, parking terms, the term of the lease, any tenant improvement allowances or improvements, alterations or other

monetary concessions to be provided by Landlord in connection with such prospective tenant, and all other material terms with respect to the proposed lease of the Refusal Space (collectively, the "Material Terms"). Tenant shall have a period of five (5) business days after Tenant's receipt of the Offer Notice in which to notify Landlord ("Response Notice") whether Tenant desires to lease such Refusal Space on the Material Terms.

(c) If Tenant provides a Response Notice agreeing to lease the Refusal Space on the Material Terms, Landlord shall prepare an amendment to the Lease (the "Expansion Amendment") adding such Refusal Space to the Premises on the Material Terms set forth in the Offer Notice. The Expansion Amendment shall reflect changes in the Base Monthly Rent, rentable area of the Premises, Tenant's Pro Rata Share of Operating Expenses and other appropriate terms. A copy of the Expansion Amendment shall be (i) sent to Tenant within ten (10) days after Landlord's receipt of the Response Notice, and (ii) executed by Landlord and Tenant within thirty (30) days after Tenant's receipt of same, but, upon Landlord's receipt of a Response Notice, an otherwise valid exercise of Tenant's Right of First Refusal shall be fully effective whether or not the Expansion Amendment is executed.

(d) Unless otherwise provided in the Offer Notice, and provided that there has been no material change in the condition of the Refusal Space after the date of the Response Notice (i.e., there has been no material damage or destruction to the Refusal Space), each Refusal Space (including improvements and personalty, if any) shall be accepted by Tenant in its condition and as-built configuration existing on the date the term for such Refusal Space commences.

(e) The rights of Tenant under this Section 9 with respect to a particular Refusal Space shall terminate, with respect to such Refusal Space only, if Landlord has delivered two (2) Offer Notices for such Refusal Space and Tenant has failed to timely provide a Response Notice for each such Offer Notice. In addition, the rights of Tenant under this Section 9 shall terminate upon Tenant's failure to cure a monetary default under the Lease after the expiration of applicable notice and cure periods at any time during the thirty six (36) months immediately preceding the date Landlord would have been obligated to provide Tenant an Offer Notice.

(f) The Right of First Refusal granted herein is subject and subordinate to the expansion rights (whether such rights are designated as a right of first offer, right of first refusal, expansion option or otherwise) of other existing tenants of the Building with respect to the Refusal Space that are reflected in such tenants' leases as of the Effective Date, as such rights are summarized on Exhibit C attached hereto.

10. Deleted Provisions. The rights of first refusal contained in Section 19.12.3 of the Original Lease and Section 6 of the June 15 Letter, and the options to extend contained in Section 3.1 of the Original Lease and the November 3 Letter are hereby deleted in their entireties and of no further force or effect.

11. Real Estate Fee. Within ten (10) business days after the mutual execution and delivery of this First Amendment, Landlord shall pay CB Richard Ellis, Inc. a fee in connection with this First Amendment in the amount of $87,440.00. Landlord shall indemnify, defend and hold Tenant harmless from and against any and all claims for the $87,440.00 fee payable to CB

Richard Ellis, Inc. described above, and any and all claims by any other real estate broker, salesperson or finder claiming to have represented Landlord for a commission, finder's fee or other compensation in connection with this First Amendment. Tenant shall indemnify, defend and hold Landlord harmless from and against any and all claims, other than the $87,440.00 fee payable to CB Richard Ellis, Inc. described above, by any real estate broker, salesperson or finder claiming to have represented Tenant for a commission, finder's fee or other compensation in connection with this First Amendment. Notwithstanding anything to the contrary contained in this Section 11, Tenant shall be solely responsible for any commission, fees or costs payable to any real estate broker, sales person or finder claiming to have represented Tenant in connection with any future amendment to the Lease or Tenant's exercise of the Extension Options or Right of First Refusal contained herein.

12. Notices. Section 19.2 of the Lease is hereby amended to provide that Tenant's address for notices under the Lease is as follows:

Sangamo BioSciences, Inc.
501 Canal Boulevard, Suite A100
Richmond, California 94804
Attn: Mr. Greg Zante

Senior Director, Finance and Administration

13. Authority. This First Amendment shall be binding upon and inure to the benefit of the parties, their respective heirs, legal representatives, successors and assigns. Each party hereto and the persons signing below warrant that the person signing below on such party's behalf is authorized to do so and to bind such party to the terms of this First Amendment.

14. Status of Lease. Except as amended hereby, the Lease is unchanged, and, as amended hereby, the Lease remains in full force and effect.

IN WITNESS WHEREOF, Landlord and Tenant have entered into this First Amendment as of the date first set forth above.

TENANT:		LANDLORD:	
SANGAMO BIOSCIENCES, INC., a Delaware-corporation		POINT RICHMOND R&D ASSOCIATES II, LLC, a California limited liability company	
By:	/s/ Edward O. Lanphier II	By:	/s/ Richard K. Robbins
Print Name:	Edward O. Lanphier II	Print Name:	Richard K. Robbins
Its:	President + CEO	Its:	Managing Member

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements (Form S-8 No. 333-34196 and 333-64642) and in the Registration Statements (Form S-3 No. 333-113062 and 333-68066) and in the related prospectuses of Sangamo BioSciences, Inc. of our reports dated February 23, 2005, with respect to (1) the consolidated financial statements of Sangamo BioSciences, Inc., and (2) management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting of Sangamo BioSciences, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2004.

/s/ ERNST & YOUNG LLP

Palo Alto, California
February 23, 2005

Exhibit 31.1

CHIEF EXECUTIVE OFFICER CERTIFICATE

I, Edward O. Lanphier II, certify that:

1. I have reviewed this annual report on Form 10-K of Sangamo BioSciences, Inc. (the "Registrant");

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

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

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a – 15(f) and 15d – 15 (f)) for the registrant and have:

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

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 23, 2005

/s/ Edward O. Lanphier II
Edward O. Lanphier II
President, Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

PRINCIPAL FINANCIAL OFFICER CERTIFICATE

I, Greg S. Zante, certify that:

1. I have reviewed this annual report on Form 10-K of Sangamo BioSciences, Inc.

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

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

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a – 15(f) and 15d – 15 (f)) for the registrant and have:

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

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 23, 2005

/s/ Greg S. Zante
Greg S. Zante
Senior Director, Finance and Administration
(Principal Financial and Accounting Officer)

Exhibit 32.1

Certification Pursuant to 18 U.S.C. §1350, as Adopted
Pursuant to §906 of the Sarbanes-Oxley Act of 2002

Each of the undersigned hereby certifies pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002 in his capacity as an officer of Sangamo BioSciences, Inc. (the "Company"), that:

(1) the Annual Report of the Company on Form 10-K for the period ending December 31, 2004, as filed with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Edward O. Lanphier II
Edward O. Lanphier II
President, Chief Executive Officer and Director
(Principal Executive Officer)
February 23, 2005

/s/ Greg S. Zante
Greg S. Zante
Senior Director, Finance and Administration
(Principal Financial and Accounting Officer)
February 23, 2005