

SANGAMO BIOSCIENCES INC

Form 10-K

March 01, 2007

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**UNITED STATES 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, 2006**

**OR**

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

**For the transition period from**

**to**

**Commission file number: 0-30171  
SANGAMO BIOSCIENCES, INC.**

*(Exact name of registrant as specified in its charter)*

**Delaware**

*(State or other jurisdiction of  
incorporation or organization)*

**68-0359556**

*(I.R.S. Employer  
Identification No.)*

**501 Canal Boulevard, Suite A100  
Richmond, California**

*(Address of principal executive offices)*

**94804**

*(Zip Code)*

**(510) 970-6000**

*(Registrant's telephone number, including area code)*

**None**

*(Former name, former address and former fiscal year, if changed since last report)*

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

**Title of each class**

**Name of each exchange on which registered**

**Common Stock, \$0.01 par value per share**

Nasdaq Global Market, Inc.

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes  No

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).  
Yes  No

The aggregate market value of the voting stock held by non-affiliates of the registrant based upon the closing sale price of the common stock on June 30, 2006 (the last day of the registrant's most recently completed second fiscal quarter), as reported on the Nasdaq Global Market was approximately \$173,813,670. For purposes of this calculation, directors and executive officers of the registrant have been deemed affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

<b>Class</b>	<b>Outstanding at February 1, 2007</b>
<b>Common Stock, \$0.01 par value per share</b>	<b>35,049,862 shares</b>

**DOCUMENTS INCORPORATED BY REFERENCE**

<b>Document</b>	<b>Parts Into Which Incorporated</b>
<b>Proxy Statement for the 2007 Annual Meeting of Stockholders</b>	<b>Part III</b>

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**SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

Some statements contained in this report are forward-looking with respect to our operations, research and development activities 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;

product development and commercialization of our products;

clinical trials;

revenues from existing and new collaborations;

our research and development and other expenses;

sufficiency of our cash resources;

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, 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 Risk Factors 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 BioSciences is developing a new class of human therapeutics. We are a leader in the research, development, and commercialization of DNA-binding proteins for the therapeutic regulation and modification of disease-related 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<sup>TM</sup>, 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, or ZFNs<sup>TM</sup>. Engineered ZFNs can be used to cut genomic DNA at a pre-selected sequence location, enabling ZFN-mediated disruption of genes that facilitate or are responsible for disease pathology, correction of genes that contain disease-causing mutations, or the targeted addition of a selected DNA sequence.

The pharmaceutical industry has invested billions of dollars to discover and validate new drug targets over the last several decades. While there have been many successes, in several cases it has proven difficult to identify small-molecule drugs, monoclonal antibodies or recombinant proteins that can therapeutically modulate these targets in man. We believe that our ZFP technology platform constitutes a new therapeutic approach enabling the regulation or modification of therapeutically relevant genes that have proven intractable to conventional methods of drug discovery. By developing ZFP Therapeutic<sup>TM</sup> products based on regulation or modification of such targets at the DNA level, Sangamo is focused on establishing a new therapeutic product development technology platform for a novel

class of drugs. In November 2006, we initiated the first Phase 2 clinical trial of a ZFP Therapeutic (SB-509) in patients with diabetic neuropathy. Enrollment and treatment in an earlier Phase 1 trial of SB-509 for this indication was completed in

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November 2005. In October 2006, we established a partnership with the Juvenile Diabetes Research Foundation International ( JDRF ) who will provide up to \$3 million toward the costs of the Phase 2 clinical trial based upon the achievement of certain milestones. We have also announced that in the first half of 2007, we intend to initiate a Phase 2 clinical trial to test SB-509 in patients with moderate to severe diabetic neuropathy that have blocked nerves in their leg. In December 2006, we acquired a clinical-stage ZFP TF therapeutic angiogenesis program from Edwards Lifesciences LLC ( Edwards ). This included a completed Phase 1 clinical trial and an ongoing Phase 1 clinical study both designed to evaluate the safety and preliminary efficacy of a proprietary Sangamo ZFP Therapeutic for the treatment of peripheral artery disease (PAD), as well as a pre-clinical program in ischemic heart disease (IHD). Sangamo also expects to initiate Phase 1 clinical trials in its programs in HIV and in glioblastoma multiforme in the second half of 2007. In addition, we have ongoing preclinical animal studies of ZFP Therapeutics in nerve regeneration, congestive heart failure, age-related macular degeneration and neuropathic pain, as well as research-stage programs in X-linked severe combined immunodeficiency (X-linked SCID), hemophilia and hemoglobinopathies, and cancer immunotherapy. We also initiated a research-stage program in Parkinson's disease and in January 2007 we announced an award of \$950,000 from The Michael J. Fox Foundation for Parkinson's Research ( MJFF ) to help fund this program.

While we intend to invest the majority of our financial and scientific resources in the human therapeutic applications of our ZFP technology, we believe the potential commercial applications of ZFPs are broad-based and include human therapeutics, pharmaceutical protein production, and the engineering of commercial crop plants. In October 2005, we announced a Research License and Commercial Option Agreement with Dow AgroSciences, LLC (DAS), a wholly owned indirect subsidiary of Dow Chemical Corporation. Under the agreement, Sangamo is providing DAS with access to Sangamo's ZFP technology and the exclusive right to use it to modify the genomes or alter the nucleic acid or protein expression of plant cells, plants, or plant cell cultures. We have retained rights to use plants or plant-derived products to deliver ZFP transcription factors ( ZFP TFs ) or nucleases ( ZFNs ) into human or animals for diagnostic, therapeutic, or prophylactic purposes. In November 2006, DAS and Sangamo announced the achievement of the first milestones in this collaboration. In addition, we seek to capitalize on the ZFP platform by facilitating the sale or licensing of ZFP TFs or ZFNs to companies working in other fields including protein production and drug discovery. For instance, we are supplying its pharmaceutical partners Medarex Inc., Pfizer Inc, Novo Nordisk, Novartis, Amgen and Kirin Brewery Company with ZFP products, ZFP TF- and or ZFN-engineered cells for the enhanced production of therapeutic proteins, an advance that could increase the efficiency of pharmaceutical protein production. We have also 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.

We have amassed a substantial intellectual property position in the design, selection, composition, and use of engineered ZFPs to support all of these commercial activities. We either own outright or have licensed the commercial rights to approximately 141 patents issued in the United States and foreign national jurisdictions, and we have 190 patent applications owned and licensed 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 five 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 are also building our capabilities in preclinical development, regulatory affairs and clinical research and are applying these capabilities across our product development programs.

***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 regulated, i.e. turned on or turned off, 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 expression of that gene to be turned on (activated) or turned off (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 architecture of transcription factors in all higher organisms.



**Table of Contents****Figure A****The Two Domain Structure of a ZFP Therapeutic 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 many thousands of ZFPs and have tested many 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 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 data 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 Disruption, Gene Correction and Gene Addition**

Our engineered ZFPs can also be attached to the cleavage domain of a restriction endonuclease, an enzyme that cuts DNA creating a zinc finger nuclease or ZFN. The ZFN is able to recognize its intended gene target through its engineered ZFP DNA-binding domain (Figure A). When a pair of ZFNs is bound to the DNA in the correct orientation and spacing, the DNA sequence is cut between the ZFP binding sites. DNA-binding by both ZFNs is necessary for cleavage. This break in the DNA triggers a natural process of DNA repair in the cell. The repair process can be harnessed to achieve one of several outcomes that may be therapeutically useful. If cells are simply treated with ZFNs alone the repair process frequently results in an error-prone joining together of the two ends of the broken DNA and the consequent disruption of the original DNA sequence. This can result in the generation of a shortened or non-functional protein, i.e. gene disruption. We believe that ZFN-mediated gene modification may be used to disrupt a gene that is involved in disease pathology such as disruption of the CCR5 gene to treat HIV infection or the disruption of the glucocorticoid receptor gene to make engineered killer T-cells resistant to glucocorticoids as in our glioblastoma program. In contrast, if cells are treated with ZFNs in the presence of an additional donor DNA sequence that encodes the correct gene sequence, the cell can use the donor as a template to correct the cell's gene as it repairs the break resulting in ZFN-mediated gene correction. ZFN-mediated gene correction enables a corrected gene to be expressed in its natural chromosomal context and may provide a novel approach for the precise repair of DNA sequence mutations responsible for monogenic diseases such as sickle cell anemia and X-linked severe combined immunodeficiency (X-linked SCID). In addition, by making the donor sequence a gene-sized segment of DNA, a new copy of a gene can also be added into the genome at a specific location. This approach enables a one-step strategy to correct multiple mutations in a gene sequence such as in our hemophilia program. The ability to place a gene-sized segment of DNA specifically into a pre-determined location in the genome eliminates the insertional mutagenesis concerns associated with traditional gene replacement approaches.

**Table of Contents****ZFP Therapeutic Gene Disruption as a Treatment Approach for Infectious Diseases and Glioblastoma**

ZFNs can be used to disrupt a gene sequence. This may have therapeutic applications in diseases such as HIV infections. To effect ZFN-mediated gene disruption, ZFNs are introduced into cells without a 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 which frequently results in disruption of the gene's normal coding sequence. The disrupted gene sequence now encodes 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 a co-factor for HIV infection of T-cells and other cells of the immune system with the aim of making cells resistant to HIV infection.

We are also using ZFN-mediated gene disruption in our program to develop glucocorticoid-resistant killer T-cells as an allogeneic cellular immunotherapy approach for glioblastoma.

**ZFP Therapeutic Gene Correction of Monogenic Disease**

Genetic diseases such as X-linked SCID, sickle cell anemia, hemophilia and  $\beta$ -thalassemia 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.

The process Sangamo uses for gene correction takes advantage of a specialized form of a natural process 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 its low efficiency. 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, we have shown in research published in the scientific journal *Nature* (**Nature**, June 2005. vol: 435; pp 646-651) 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 fold. The data published in *Nature* demonstrated the use of engineered ZFNs to correct errors in the DNA sequence of the IL2-R gamma gene, the gene that is defective in X-linked SCID. Correction was achieved in a significant percentage of treated cells without the need for selection. Importantly, gene correction was permanent and eliminated the need for random integration of foreign DNA sequences, a cause of problems in certain gene therapy studies. ZFP Therapeutic gene correction is a revolutionary technical approach to gene repair because ZFNs 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, hemophilia and hemoglobinopathies such as sickle cell anemia and  $\beta$ -thalassemia. In addition, our ZFNs can be used to target the addition of a DNA sequence into a specific site in the genome, which may also be applied to the correction of mutations in genes.

**A New Class of Human Therapeutics**

With our ability to deliver gene-specific ZFP TFs for the activation or repression of genes and ZFNs for the correction, disruption or addition of target genes and DNA sequences, we are focused on developing a new 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 through clinical trials. There are many new drug targets that have a clear role in disease processes but cannot be bound or modulated for therapeutic purposes by small molecules with drug-like properties yet have a clear role in disease processes. 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-related or therapeutic gene as opposed to the RNA or protein target encoded by that gene. ZFNs can be used to directly correct or modify a gene. Thus, a protein target which may be intractable to small molecule control can instead be turned up, turned down or modified 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 and ZFNs provide the means for specific and efficient

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gene modification. This mode of action is not available to antisense RNA, siRNA, which act by interfering with the expression of cellular RNA, or conventional small molecules, antibodies, or other protein pharmaceuticals that act at the protein level.

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

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 themselves can be expressed either transiently, for acute indications, or longer term, for chronic conditions;

ZFNs can be used to disrupt genes involved in disease processes, correct genes responsible for monogenic diseases and add genes into genomes in a targeted fashion;

Permanent gene disruption, correction, or addition requires only transient cellular expression of ZFNs.

## **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 a defined level of affinity and specificity and can regulate or modify these targets to cause 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 much of these data in peer-reviewed journals. In January 2005, we 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 our first Phase 1 clinical study of a ZFP Therapeutic. This trial was a single blind, placebo-controlled, dose-escalation study designed to investigate the safety and preliminary efficacy of a ZFP TF formulation, SB-509. SB-509 is designed to up-regulate the expression of vascular endothelial growth factor A (VEGF-A) in patients with mild to moderate diabetic neuropathy (DN). In May 2005, we announced that this Phase 1 clinical trial had begun and in November 2005 we reported that we had completed subject enrollment and treatment in the trial. This Phase 1 clinical trial was amended to allow for the treatment of additional subjects at the two highest doses previously tested. We have presented initial data from this Phase 1 trial and initiated a Phase 2 trial in DN in November, 2006. In December 2006, Sangamo acquired all rights to EW-A-401, the ZFP TF activator of VEGF, that was being developed in a therapeutic angiogenesis program by Edwards Lifesciences LLC. This included two Phase 1 trials of a ZFP Therapeutic: the first, in the intermittent claudication (IC) stage of PAD conducted at the National Heart, Lung and Blood Institute (NHLBI), National Institutes of Health (NIH) and a second trial in the more severe form of PAD, critical limb ischemia (CLI), conducted at Duke University Medical Center. An additional preclinical program in ischemic heart disease was also part of this acquisition.

We also have preclinical programs for the treatment of HIV/AIDS and cancer for which we intend to file INDs in the second half of 2007. We are developing additional preclinical data to support the evaluation of ZFP Therapeutics for nerve regeneration, neuropathic pain, cardiovascular disease, and monogenic diseases including X-linked SCID and hemophilia and hemoglobinopathies.

### **Product Development Programs**

In addition to our ongoing Phase 2 clinical trial in DN and Phase 1 clinical trial in PAD, we currently have multiple preclinical-stage programs (i.e., lead ZFP TF molecules in animal efficacy studies) as well as several research-stage programs (i.e., cell-based testing to identify and optimize lead ZFP TF or ZFN molecules for testing in animals).

**Table of Contents****Clinical****Indication**

Diabetic neuropathy (DN)

**Development Stage**

Phase 2 clinical trial initiated November 2006 and ongoing at multiple sites.

**Therapeutic Approach**

ZFP TF (SB-509) up-regulation of Vascular endothelial growth factor (VEGF-A) to protect neuronal and glial cells

**Comments**

Phase 1 No drug-related SAEs. Preliminary results show anecdotal evidence of activity, including instances of apparent nerve recovery. Phase 2 is a repeat-dosing, randomized, double-blind, placebo-controlled, multi-center trial.

Diabetic neuropathy (DN) Blocked Nerve Regeneration

Phase 2 trial expected to commence first half of 2007

ZFP TF (SB-509) up-regulation of VEGF-A to protect neuronal and glial cells

Phase 1 preliminary results showed anecdotal evidence of restoration of activity of nerve conduction velocity (NCV) in subjects with blocked nerve. Phase 2 repeat-dosing trial.

Peripheral artery disease (PAD) Intermittent claudication (IC)

Phase 1 clinical trial ongoing at NHLBI, NIH

ZFP TF (EW-A-401) up-regulation of VEGF-A to induce angiogenesis, or blood vessel formation, in the lower extremities

Evaluating product safety and preliminary evidence of increase in blood flow in lower extremities of patients with intermittent claudication.

Peripheral artery disease (PAD) Critical limb ischemia (CLI)

Phase 1 trial at Duke University Medical School. Enrollment and treatment completed.

ZFP TF (EW-A-401) up-regulation of VEGF-A to induce angiogenesis, or blood vessel formation, in the lower extremities

Evaluation of product safety.

Human immunodeficiency virus (HIV) infection and Acquired immune deficiency syndrome (AIDS)

Pre-IND. Anticipated IND filing in second half of 2007

ZFN-mediated disruption of CCR5 gene in isolated T- cells, from patients infected with HIV

A well-documented mutation in CCR5 (CCR5 delta 32) exists in humans and confers resistance to HIV infection.

Oncology (Glioblastoma multiforme)	Pre-IND. Anticipated IND filing in second half of 2007	ZFN-mediated disruption of the Glucocorticoid Receptor (GR) in CD8 <sup>+</sup> T-cells engineered to express a Zetakine (a receptor on a T-cell that selectively binds to glioblastoma cells)	A Zetakine CD8 <sup>+</sup> T-cell product has shown to decrease tumors in two patients with glioblastoma multiforme. However, the glucocorticoid, Decadron, is used to reduce the inflammation caused by the treatment and surgery. Decadron binds to the GR on T-cells and inactivates them, thus shortening the duration of response. ZFN-mediated disruption of GR on T-cells is designed to protect them from the effects of Decadron and enable an allogeneic product.
Ischemic heart disease (IHD)	Preclinical (animal efficacy)	ZFP TF up-regulation of VEGF-A to induce angiogenesis in the ischemic heart	Evaluating the preclinical efficacy of up-regulation of VEGF-A in large-animal models.
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. Evaluating the preclinical efficacy of PLN repression to increase the contractility of heart muscle in a rat model of congestive heart failure.
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. Evaluating various formulations of ZFP TFs in animal models for the down-regulation of cell surface receptor (TrkA),

			and ion-channel (PN3) .
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	Evaluating delivery methods and dosing of ZFP TF in models of nerve crush and spinal cord injury.
Age-related macular degeneration (AMD)	Preclinical (animal efficacy)	ZFP TF mediated up-regulation of Pigment epithelium derived factor (PEDF)	Evaluating PEDF ZFP TF to inhibit angiogenesis in the eye.
Oncology	Preclinical (animal efficacy)	ZFP TF mediated up-regulation of PEDF and granulocyte macrophage colony stimulating factor (GM-CSF)	GM-CSF is a powerful stimulator of the immune system and PEDF is a potent antiangiogenic factor. Evaluating the combination of ZFP TFs as a means to stimulate a cell-mediated, antitumor response and reduce the vascularization of the tumor mass.
Parkinson s Disease (PD)	Research	ZFP TF mediated up-regulation of glial cell line-derived neurotrophic factor (GDNF)	GDNF is a potent neurotrophic factor that has shown promise in preclinical testing to slow or stop the progression of Parkinson s disease.

*Table 1.* Sangamo s clinical and preclinical ZFP Therapeutic product development programs.

#### ***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 which may evolve into 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. The rate of amputation for people with diabetes is ten times higher that for non-diabetics and more than 60% of non-traumatic lower-limb amputations in the United States occur among people with diabetes. In 2002, that translated to approximately 82,000 non-traumatic lower limb amputations. The American Diabetes Association (ADA) estimates that there are approximately 20.8 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.



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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 of pain but 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 endogenous VEGF-A gene. In January 2005, we filed an IND with the FDA for SB-509 for the treatment of mild to moderate diabetic neuropathy. We have completed enrollment and treatment of a Phase 1a, single blind, dose-escalation trial to measure the laboratory and clinical safety of SB-509 and extended this study to a larger Phase 1b study. Data from our Phase 1 trials presented at the 66th Scientific Sessions of the ADA demonstrated that a single treatment of SB-509 was well-tolerated and that no drug-related severe adverse events were observed. Subjects in the Phase 1b study and in the top dose cohorts of the Phase 1a trial were treated within the pharmacologically effective dose range demonstrated to be efficacious in preclinical animal studies, and anecdotal improvements in clinical symptoms were observed. We initiated a double-blind, placebo-controlled, repeat-dosing multi-center Phase 2 clinical trial of SB-509 in November 2006. In October 2006, we entered into an agreement with JDRF to provide up to \$3.0 million in funding to support this trial.

We also intends to initiate a Phase 2 repeat-dosing trial in the first half of 2007 in subjects that have severe DN or so-called blocked nerve or no measurable NCV in at least one of the nerves in a lower limb.

***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; the subsequent stage, which is marked by foot pain in the absence of exercise, is known as resting pain. Further progression leads to tissue damage and severely impaired mobility, a stage known as critical limb ischemia (CLI). The condition affects 8-12 million people in the United States. Prevalence increases with age, and by age 70, affects approximately 20 percent of the population. Eighty percent of these patients have intermittent claudication and do not progress to resting pain or critical limb ischemia. The initial development of a formulation of a ZFP TF (EW-A-401) an activator of VEGF-A for therapeutic angiogenesis was funded and managed by Edwards Lifesciences. In December 2006, we acquired this clinical-stage ZFP TF therapeutic angiogenesis program from Edwards. This included a Phase 1 clinical trial at the National Heart Lung and Blood Institute (NHLBI) at the National Institutes of Health (NIH) for EW-A-401 to treat intermittent claudication (IC) initiated in August, 2004 and a Phase 1 human clinical trial for CLI that was initiated in June 2005 at Duke University Medical Center. Accrual and treatment of subjects on this latter trial was completed at the end of 2006.

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

According to UNAIDS/WHO, in 2006, over 4.3 million people were newly infected with HIV, and there are now over 40 million people world-wide living with HIV and AIDS. An estimated 2.9 million people died of AIDS in the same year. The CDC estimates that, in the United States alone, there were 1.0 million people living with HIV/AIDS, approximately 46,000 new infections and 17,000 deaths in 2005.

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 a co-receptor for HIV entry into T-cells and, if CCR5 is not expressed on their surface, HIV is less efficient at infecting these cells. A population of individuals that is immune to HIV infection, despite multiple exposures to the virus, has been identified and extensively studied. The majority of these individuals have a natural mutation, CCR5delta32, that results in the expression of a shortened, or truncated, and non-functional CCR5 protein. This mutation appears to have no observable deleterious effect. 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 HIV and opportunistic infections. In collaboration with scientists at the University of Pennsylvania and Children's Hospital, Los Angeles, we are pursuing both *ex-* and *in-vivo* approaches in T-cells and hematopoietic stem

cells. We expect to file an IND for a Phase 1 trial of our CCR5 ZFN Therapeutic in late 2007.

**Table of Contents*****Oncology***

The American Cancer Society estimates that the incidence of new cancer cases was approximately 1.4 million in 2006, with 564,830 cancer deaths, accounting for 1 of every 4 deaths in the United States. We believe our ZFP technology has potential applications in cancer therapy, in regulating endogenous genes and in activating the body's natural mechanisms for fighting disease. We have two active ZFP Therapeutic programs.

***Glioblastoma Multiforme***

Gliomas are the most common type of primary brain tumors; 20,000 cases are diagnosed and 14,000 glioma-related deaths occur annually in the United States. Glioblastoma multiforme (GM), a type of glioma, is rapidly progressive and nearly uniformly lethal. Currently, malignant glioma is managed through surgery and radiation that often exacerbates the already severe symptoms caused by the location of the tumor. With modern surgical and radiotherapeutic techniques the mean duration of survival has increased to 82 weeks, although 5-year survival rates have only increased from 3 to 6%. Resections of >90% of bulky tumors are usually attempted provided that vital functional anatomy is spared. Chemotherapy, resection and radiation provide only marginal survival advantage to patients. Approximately 80% of recurrent tumors arise from remnants of the original incompletely resected tumor. The median survival of recurrent glioblastoma multiforme patients treated with a second resection is 36 weeks.

In collaboration with clinicians at City of Hope (COH) we are developing a ZFP Therapeutic that uses our ZFN technology to disrupt the expression of the gene encoding the glucocorticoid receptor. Our collaborators have developed an IL-13 zetakine that, when expressed in cytotoxic or killer T-cells, enables them to seek out and destroy glioblastoma cells in the brain. In an investigator-sponsored IND patients have been treated with zetakine-modified T-cells which have shown significant anti-tumor activity. In the current clinical protocol, T-cells are removed from a patient with GM and modified to express the zetakine. These modified cells are infused into the brain following surgery for the targeted elimination of residual tumor cells. Frequently, however, a glucocorticoid such as Decadron must be administered to patients post-surgery to control brain swelling. Glucocorticoids inactivate or kill the therapeutic T-cells through a protein on the T-cell surface known as the glucocorticoid receptor (GR). Cells without a functional GR are drug-resistant and are therefore available to destroy tumor cells. Our goal is to generate zetakine positive, GR-negative T-cells thus enabling the full treatment effect to occur even in the presence of Decadron. In December 2006, we entered into a broad, exclusive license agreement with the COH for use of the zetakine with our technology. Sangamo retains commercialization rights and COH receives success-based milestone and downstream payments. We anticipate filing an IND for this therapeutic in late 2007.

***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, and approximately 1.1 million revascularization procedures are carried out in the United States each year. However, patients with downstream blood flow restrictions often do not fully benefit from these interventions. We have developed a ZFP TF designed to up-regulate the expression of VEGF-A for therapeutic angiogenesis for the potential treatment of post-myocardial infarction ischemic heart disease. The IHD program was funded and managed by our partner, Edwards Lifesciences, and is part of the asset that Sangamo acquired from Edwards in December 2006. Preclinical large-animal efficacy studies are ongoing at Yale University School of Medicine.

***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 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.



**Table of Contents*****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 in intensity 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 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 continued testing in animal models of pain during 2007.

***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. 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 including models of spinal cord injury and nerve trauma.

***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 lead 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. These ZFP TFs are being tested in preclinical animal models of AMD.

***ZFP Therapeutic Research Program***

We have a research stage therapeutic gene regulation program in Parkinson's disease (PD). In January 2007, we were awarded funding by The Michael J. Fox Foundation for Parkinson's Research (MJFF) to support the development of a ZFP TF activator of glial cell line-derived neurotrophic factor (GDNF) to treat PD. The \$950,000 award will be paid over a period of two years. We also have a research stage program to develop a therapeutic vaccine for cancer. We are engineering adenoviral vectors to deliver ZFP TFs that can simultaneously 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 by engaging the immune system and reducing the blood supply that supports tumor growth.

We also have several research stage gene modification programs in progress. These initiatives include programs in the hemophilia and the hemoglobinopathies and in immune system disorders such as X-linked severe combined immunodeficiency (X-linked SCID).

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### **Product Development Resources and Infrastructure**

As Sangamo continues to progress as a clinical development-stage biotechnology company, we are building our gene delivery capabilities and our capabilities in regulatory affairs, quality assurance and clinical research. In December 2006, Sangamo hired three members of the development team that had been employed by Edwards to manage their ZFP TF therapeutic angiogenesis program. We are establishing regulatory affairs, quality assurance and clinical research expertise internally, while relying on third-party contract manufacturers of ZFP Therapeutic products and contract research organizations for toxicology and initial clinical studies. Our manufacturing and quality assurance personnel 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 Sangamo and our strategic partners and collaborators with potential 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

We believe the advancement of our first ZFP Therapeutics into clinical trials has come at a timely point in the evolution of the worldwide pharmaceutical industry. Large pharmaceutical companies face revenue growth challenges that compel them to in-license or acquire emerging therapeutic technologies. The advancement of ZFP Therapeutics into Phase 2 clinical trials in 2006 may bring attention to our other ZFP Therapeutic programs and to the potential of ZFP Therapeutics to address the non-druggable, yet high-value drug targets residing within pharmaceutical research laboratories today.

#### **Recently Terminated Strategic Partnership with Edwards Lifesciences**

In December 2006, we entered into an Asset Purchase Agreement with Edwards Lifesciences LLC ( Edwards ) to acquire all of the assets in Edwards ZFP TF angiogenesis program, including regulatory filings, clinical data, and GMP product in exchange for one million shares of our unregistered Common Stock and certain royalties. This transaction was valued at \$5.8 million based on the fair value of our publicly traded stock at the closing date of the transaction less a discount for lack of marketability in the unregistered Common Stock. Under the agreement, we agreed to pay Edwards royalties generated by the sales of certain human therapeutic products, including products to treat ischemic cardiovascular and vascular disease and diabetic neuropathy, based upon ZFP TF activation of the VEGF gene: the first product is not expected to be available for sale before 2012. The amount of royalties payable to Edwards is equal to (i) five percent (5%) of the net sales of each such product sold by us and (ii) the greater of (a) five percent (5%) of the net sales of each such product sold by a sublicensee of us or (b) twenty-five percent (25%) of the royalty payment received by us from our sublicensee on account of such product sold by such sublicensee; provided that total royalties paid by us under the agreement shall not exceed \$20 million in any calendar year or \$100 million in the aggregate. In connection with this transaction, we and Edwards terminated our prior agreements entered in January 2000.

#### **Agreement with LifeScan for Regenerative Medicine**

In September 2004, we announced that we had entered into a research agreement with LifeScan, Inc., a Johnson & Johnson company. The agreement provides LifeScan with our ZFP TFs for use in a program to develop therapeutic cell lines as a potential treatment for diabetes. In December 2004 and September 2005, this agreement was expanded to include additional targets important in diabetes. The agreements represented our first collaboration in the field of regenerative medicine. During 2006, 2005 and 2004, revenues attributable to collaborative research and development performed under the LifeScan agreements were \$600,000, \$365,000 and \$85,000, respectively. Related costs and expenses associated with research and development performed under the LifeScan agreements were \$151,000 in 2006, \$69,000 in 2005 and \$5,000 in 2004. We have completed our contract and will not continue in 2007.

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### **Enabling Technology Programs**

We began marketing our Enabling Technologies to the pharmaceutical and biotechnology industry in 1998. Our Enabling Technology collaborations have been based upon applying our ZFP TF and ZFN technology and intellectual property in products and areas outside of ZFP Therapeutics.

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 supplying our partners with our ZFP technology to enhance the production of pharmaceutical proteins.

### **Enabling Technology Collaborations for Pharmaceutical Protein Production**

In 2005, sales of biotech protein therapeutics reached \$44.5 billion, while revenue from therapeutic antibodies alone was \$13.6 billion. The antibody therapeutics market is expected to generate sales in excess of \$22 billion by 2007.

Sangamo scientists have demonstrated that ZFP-engineered mammalian cells may be used to increase the yield of systems used for pharmaceutical protein production. We are also applying our ZFN-technology for cell engineering in the areas of protein production and drug discovery.

We have established several research collaborations in this area. In December 2004, we announced a research collaboration agreement with Pfizer Inc to use our ZFP technology to develop enhanced cell lines for protein pharmaceutical production. The scope of this agreement was expanded in January 2006 and again in January 2007 and provided further research funding from Pfizer to develop additional cell lines for enhanced protein 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 are generating 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 quarters of 2007, 2006 and 2005, we received \$250,000, \$775,000 and \$500,000, respectively, in research-related funding under our agreements with Pfizer. Revenues attributable to collaborative research and development performed under the Pfizer agreement were \$747,000, \$790,000 and \$42,000 during 2006, 2005 and 2004, respectively. Related costs and expenses incurred under the Pfizer agreements were \$342,000 and \$154,000 during 2006 and 2005, respectively. There were no costs or expenses incurred under the Pfizer agreement during 2004. As of December 31, 2006, 2005 and 2004 accounts receivable from Pfizer represented 51%, 80% and 88%, respectively, of our total accounts receivable balance.

In January 2005, we also announced an agreement with Amgen and in September 2005 a similar agreement with Novo Nordisk A/S. We are providing our ZFP technology to several companies including Amgen, Novartis and Novo Nordisk for evaluation of its use in developing enhanced cell lines for protein production.

### **Plant Agriculture Agreement**

Sangamo scientists and collaborators have shown that ZFP TFs and ZFNs can be used to regulate and modify genes in plants. The ability to 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 may be used to facilitate the efficient and reproducible generation of transgenic plants. Effective as of October 1, 2005, we entered into a Research License and Commercial Option Agreement with Dow AgroSciences LLC ( DAS ), a wholly owned indirect subsidiary of Dow Chemical Corporation. Under this agreement, we will provide DAS with access to our proprietary ZFP technology and the exclusive right to use our ZFP technology to modify the genomes or alter the nucleic acid or protein expression of plant cells, plants, or plant cell cultures. We have retained rights to use plants or plant-derived products to deliver ZFP TFs or ZFNs into human or animals for diagnostic, therapeutic, or prophylactic purposes. In November 2006, we announced the achievement of the first milestones in this collaboration.

Our agreement with DAS provides for an initial three-year research term during which time we will work together to validate and optimize the application of our ZFP technology to plants, plant cells and plant cell cultures. A joint committee having equal representation from both companies will oversee this research. During the initial three-year research term, DAS will have the option to obtain a commercial license to sell products incorporating or derived from plant cells generated using our ZFP technology, including agricultural crops, industrial products and plant-derived



biopharmaceuticals. The option expires on September 31, 2008. This commercial license will be exclusive for all such products other than animal and human health products. In the event that DAS exercises this option, DAS may elect to extend the research program beyond the initial three-year term on a year-to-year basis.

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Pursuant to the Research License and Commercial Option Agreement, DAS made an initial cash payment to us of \$7.5 million. In November 2005, the Company sold approximately 1.0 million shares of common stock to DAS at a price of \$3.85 per share, resulting in proceeds of \$3.9 million. In addition, DAS will provide between \$4.0 and \$6.0 million in research funding over the initial three-year research term and may make an additional payment of up to \$4.0 million in research milestone payments to us during this same period, depending on the success of the research program. In the event that DAS elects to extend the research program beyond the initial three-year term, DAS will provide additional research funding. If DAS exercises its option to obtain a commercial license, we will be entitled to full payment of the \$4.0 million in research milestones, a one-time exercise fee of \$6.0 million, minimum annual payments of up to \$25.25 million, development and commercialization milestone payments for each product, and royalties on sales of products. Furthermore, DAS will have the right to sublicense our ZFP technology to third parties for use in plant cells, plants, or plant cell cultures, and we will be entitled to 25% of any cash consideration received by DAS under such sublicenses.

We have agreed to supply DAS and its sublicensees with ZFP TFs and/or ZFNs for both research and commercial use. If DAS exercises its option to obtain a commercial license, DAS may request that we transfer, at DAS's expense, the ZFP manufacturing technology to DAS or to a mutually agreed-upon contract manufacturer.

The Research License and Commercial Option Agreement will terminate automatically if DAS fails to exercise its option for a commercial license by the end of the initial three-year research term or September 31, 2008. DAS may also terminate the agreement at the end of the second year of the initial research term if the joint committee overseeing the research determines that disappointing research results have made it unlikely that DAS will exercise the option; we are guaranteed to receive \$4.0 million in research funding from DAS prior to such a termination. Following DAS's exercise of the option and payment of the exercise fee, DAS may terminate the agreement at any time. In addition, each party may terminate the agreement upon an uncured material breach of the other party. In the event of any termination of the agreement, all rights to use our ZFP technology will revert to us, and DAS will no longer be permitted to practice our ZFP technology or to develop or, except in limited circumstances, commercialize any products derived from our ZFP technology. Revenues related to the research license under the DAS agreement are being recognized ratably over the initial three year research term of the agreement and were \$2.5 million during 2006 and \$625,000 during 2005. Revenues attributable to collaborative research and development performed under the DAS agreement were \$2.4 million during 2006 and \$51,000 during 2005. Revenues attributable to milestone payments were \$330,000 during 2006. Related costs and expenses incurred under the DAS agreement were \$568,000 and \$51,000 during 2006 and 2005 respectively.

**Funding from Research Foundations****The Juvenile Diabetes Research Foundation International**

On October 26, 2006, we announced a partnership with the Juvenile Diabetes Research Foundation International (JDRF) to provide financial support of Sangamo's upcoming Phase 2 human clinical studies of SB-509, a ZFP Therapeutic that is in development for the treatment of diabetic neuropathy. Under the agreement with JDRF and subject to its terms and conditions, including the Company's achievement of certain milestones associated with the Company's Phase 2 clinical trial of SB-509 for the treatment of diabetic neuropathy, JDRF will pay the Company an aggregate amount up to \$3.0 million. After the first commercial launch of SB-509 in a major market, JDRF has the right to receive, subject to certain limitations, annual payments from us, until such time when the total amount paid to JDRF, including payments made on account of the our licensing arrangements, equals three times the amount received by us from JDRF. We are obligated to cover all costs of the Phase 2 trial that are not covered by JDRF's grant.

**The Michael J. Fox Foundation**

On January 23, 2007, Sangamo announced a partnership with the Michael J. Fox Foundation (MJFF) to provide financial support of Sangamo's ZFP TF<sup>TM</sup> to activate the expression of glial cell line-derived neurotrophic factor (GDNF) that has shown promise in preclinical testing to slow or stop the progression of Parkinson's disease. Under the agreement with MJFF and subject to its terms and conditions, MJFF will pay the Company \$950,000 award over a period of two years.

**Table of Contents****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 (MIT), Johnson & Johnson, The Scripps Research Institute (TSRI), Johns Hopkins University, Harvard University, the Medical Research Council, the California Institute of Technology, and the University of Utah. These licenses grant us rights to make, use, and sell ZFPs and ZFP TFs under 13 families of patent filings. As of January 1, 2007, these patent filings have resulted in 16 issued U.S. patents and 17 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 January 1, 2007, we had 56 families of Sangamo-owned patent filings, including 34 issued U.S. patents, 74 granted foreign patents, 76 pending U.S. patent applications and 85 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**

<b>Patent No.</b>	<b>Subject</b>	<b>Issue Date</b>	<b>Expiration Date*</b>
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
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	August 31, 2004	January 12, 2019

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	Preselected Sites		
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
6,866,997	Nucleic Acid Binding Proteins (Design Rules II)	March 15, 2005	May 26, 2018
6,919,204	Modulation of Gene Expression using Localization Domains	July 19, 2005	September 28, 2021
6,933,113	Modulation of Endogenous Gene Expression in Cells	August 23, 2005	January 12, 2019
6,977,154	ZFPs that Bind Modified (Methylated) DNA	December 20, 2005	March 17, 2019
6,979,539	Regulation of Endogenous Gene Expression in Cells Using Zinc Finger Proteins	December 27, 2005	January 12, 2019
6,989,269	Cells for Drug Discovery	January 24, 2006	Feb. 8, 2021
7,001,768	Targeted Modification of Chromatin Structure.	February 21, 2006	April 27, 2021

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<b>Patent No.</b>	<b>Subject</b>	<b>Issue Date</b>	<b>Expiration Date*</b>
7,013,219	Regulation of Endogenous Gene Expression in Cells Using Zinc Finger Proteins	March 14, 2006	Jan. 12, 2019
7,026,462	Regulation of Angiogenesis with Zinc Finger Proteins	April 11, 2006	Dec. 7, 2020
7,030,215	Position Dependent Recognition of GNN Nucleotide Triplets by Zinc Fingers	April 18, 2006	March 23, 2020
7,045,304	Cells for Drug Discovery	May 16, 2006	Feb. 8, 2021
7,053,264	Nuclear Reprogramming Using ISWI and Related Chromatin Remodeling ATPases	May 30, 2006	Sept. 28, 2021
7,067,317	Regulation of Angiogenesis with Zinc Finger Proteins	June 27, 2006	Dec. 7, 2020
7,070,934	Ligand-Controlled Regulation of Endogenous Gene Expression	July 4, 2006	June 5, 2023
RE39,229	Binding Proteins for Recognition of DNA	August 8, 2006	Aug. 17, 2015
7,097,978	Screening Methods Based on Isolating a Collection of Polynucleotides Corresponding to Accessible Regions of Chromatin	August 29, 2006	April 27, 2021

**Licensed US Patents**

<b>Patent No.</b>	<b>Subject</b>	<b>Issue Date</b>	<b>Expiration Date*</b>
5,356,802	Functional domains in <i>Flavobacterium okeanoikoites</i> ( <i>FokI</i> ) restriction endonuclease	October 18, 1994	October 18, 2011
5,436,150	Functional domains in <i>Flavobacterium okeanoikoites</i> ( <i>FokI</i> ) restriction endonuclease	July 25, 1995	July 25, 2012
5,487,994	Insertion and deletion mutants of <i>FokI</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 <i>lig</i> 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
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
6,903,185	Poly Zinc Finger Proteins with Improved Linkers	June 7, 2005	March 1, 2019
7,153,949	Nucleic Acid Encoding Poly Zinc Finger Proteins with Improved Linkers	December 26, 2006	March 1, 2019

\* The expiration dates for patents shown on this

chart may be subject to Patent Term Adjustment (due to delays in prosecution by the U.S. Patent & Trademark Office), Patent Term Extension (due to review of a patented product by a regulatory agency) or terminal disclaimer. Accordingly, all expiration dates shown in this chart are estimated dates.

#### **Technology Licenses**

**Set forth below is a summary of material technology licenses to which we are a party:**

##### **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, we have made a total of \$210,000 in milestone payments to MIT. Aggregate potential milestone payments under this agreement are approximately \$465,000 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.

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**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. We have made a total of \$37,500 in milestone payments to date and are 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.

On December 8, 2006, the Company received a letter from JHU stating that, according to JHU's records, the Company has failed to comply with certain diligence obligations in the Company's license agreement with JHU. The Company and JHU have entered into discussions regarding a possible resolution of this issue. The outcome of this matter cannot be determined at this time.

**Johnson & Johnson**

We 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. These patents were originally licensed by J&J from the Scripps Research Institute. 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, we have 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**

We 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**

We 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. In an amendment to this agreement dated February 28, 2005, we were granted a worldwide exclusive license in all fields of use. Pursuant to the agreement, we have 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 ZFNs for therapeutic gene correction in human healthcare and gene targeting in plant agriculture. The agreement terminates 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.

**Table of Contents****City of Hope**

We entered into a license agreement on December 5, 2006 with City of Hope (COH), a leading California biomedical research facility and Comprehensive Cancer Center, whereby the Company was granted an exclusive, worldwide license, with the right to sublicense, to COH intellectual property related to a chimeric immunoreceptor (zetakine) useful in treating human cancers. The Company and COH have also entered into a research collaboration to develop a novel cell therapy combining this technology with Sangamo's proprietary zinc finger DNA binding protein nuclease (ZFN<sup>TM</sup>) technology for treatment of glioblastoma multiforme (GM), a progressive and usually fatal brain cancer. Under the terms of the license agreement, Sangamo will pay COH an up-front license fee and annual maintenance fees. COH is also eligible for payments relating to clinical milestones, royalties and a portion of any revenue that Sangamo may realize from sublicensing agreements. The license granted to us allows Sangamo to manufacture, use, import, offer for sale, and sell licensed products in the field under the COH patent rights, and is exclusive for the treatment or prevention of disease in humans using a combination of the zetakine and disruption of the expression or function of an endogenous gene.

**Estimated Licensing Expenses**

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 \$1.5 million. For risks associated with our intellectual property, see Risk Factors. 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.

**Intellectual Property Related Risks**

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 revoked as a result of an opposition by a third party. We have appealed the revocation but cannot predict the outcome of our appeal. See Risk Factors. 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 Risk Factors. 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.





**Table of Contents****Intellectual Property Related Advantages**

We have been advised that certain aspects of 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 even more stringent than 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, our 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 Risk Factors 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 several 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 and gene modification 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 and ZFN technology may participate in highly competitive markets.

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 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 Medarex, Genentech, Amgen, Medimmune, as well as Astra Zeneca and Protein Design Labs.

Protein pharmaceuticals under development at pharmaceutical and biotechnology companies such as Amgen, Genentech, Johnson & Johnson, Eli Lilly and Biogen Idec and numerous other pharmaceutical and small biotechnology firms.

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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, GenVec, Targeted Genetics, and VirxSys.

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, Merck 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 U.S. Food and Drug Administration (FDA) of an Investigational New Drug (IND) Application. We filed a Phase 1 clinical protocol for review by the NIH RAC in the fourth quarter of 2004, an IND in January 2005, and a Phase 2 protocol for review by the FDA in 2006 for our first product candidate, SB-509, for the potential treatment of diabetic neuropathy. Edwards Lifesciences, also submitted a Phase 1 clinical protocol for review by the NIH RAC in the fourth quarter of 2003 and filed a ZFP Therapeutic IND application with the FDA in February 2004. 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.

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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 of each participating hospital before it can begin. Phase 1 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 2 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 3 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 can delay, limit or prevent regulatory approvals. We have recently initiated our first Phase 2 clinical trial.

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 clinical and regulatory affairs to assist us in obtaining appropriate regulatory approvals as required. In 2004, 2005 and 2006, 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 **Risk Factors** 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**

Research and development expenses have consisted primarily of salaries and related personnel expenses, stock-based compensation expense, laboratory supplies, pre-clinical and clinical studies, allocated facilities costs, subcontracted research expenses, and expenses for trademark registration and technology licenses. Costs to acquire technologies that are utilized in research and development and that have no alternative future use are expenses as incurred. Research and development expenses were \$21.5 million, \$10.9 million, and \$11.2 million for 2006, 2005 and 2004, respectively. 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 increasingly focus on development of ZFP Therapeutics. Specifically, in order to develop ZFPs as commercially relevant therapeutics, we expect to expend additional resources on manufacturing, regulatory affairs and clinical research.

### **EMPLOYEES**

As of January 31, 2007, we had 75 full-time employees, all of which are located in Richmond, California. None of our employees are 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>. 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.

**Table of Contents****Item 1A. Risk Factors**

*We have increased the focus of our research and development programs on human therapeutics, which will 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 may reduce our revenues and increase operating expenditures due to larger financial outlays to fund preclinical studies, manufacturing, and clinical research. The focus on ZFP Therapeutics 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 several years, our strategy has shifted toward placing greater emphasis on proprietary research and therapeutic development and we expect this trend will continue in 2007 as we prosecute our first Phase 2 clinical trial and bring new ZFP Therapeutics into clinical trials. 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.

*We have initiated several Phase 1 clinical trials in our lead ZFP Therapeutic program, and ZFP Therapeutics have undergone limited testing in humans. We have completed enrollment and treatment of the patients in the first of these trials of SB-509 for diabetic neuropathy and thus far have not observed any serious drug-related adverse events. However if our lead ZFP Therapeutic fails one of its initial safety studies, it could reduce our ability to attract new investors and corporate partners.* In January 2005, we 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 have completed enrollment and treatment of a Phase 1, single blind, dose-escalation trial to measure the laboratory and clinical safety of SB-509 and initiated a Phase 2 clinical trial for this indication. In addition, Phase 1 clinical trials of an identical ZFP TF has been carried out in subjects with peripheral artery disease. These early studies of a ZFP Therapeutic are a highly visible test of our ZFP Therapeutic approach. Since we have increased our focus on ZFP Therapeutic research and development, investors will increasingly assess the value of our 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 our stock.

*The results of early Phase 1 trials are based on a small number of patients over a short period of time, and our progress 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 initial results from the Phase 1 clinical trial of our ZFP Therapeutic, SB-509 product, became available in the first half of 2006. The primary end point of the trial was clinical and laboratory safety, however we collected some preliminary efficacy data that showed trends of clinical improvement in some subjects. Typically, our Phase 1 clinical trials for indications of safety enroll less than 50 patients. We anticipate that our Phase 2 clinical trials for safety and efficacy would typically enroll approximately 100 patients. Actual results with more data points may not confirm favorable results from 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 be reproducible. If a larger population of patients does not

experience positive results, or if these results are reproducible, our products may not receive approval from the FDA. Failure to demonstrate the safety and effectiveness of our ZFP Therapeutic products in larger patient populations could have a material adverse effect on our business that would cause our stock price to decline significantly.

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*We have limited experience in conducting clinical trials.* Our ZFP Therapeutics may fail to show the desired safety and efficacy in initial clinical trials. We have completed a Phase 1 trial and begun a Phase 2 clinical trial, however, the FDA will require additional 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 could assume responsibility for late-stage development and commercialization.

*We may not be able to find acceptable patients or may experience delays in enrolling patients for our clinical trials.* We or the FDA 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.

*Our potential therapeutic products are subject to a lengthy and uncertain regulatory process, and we may encounter unanticipated toxicity or adverse events or fail to demonstrate efficacy, causing us to delay, suspend or terminate the the development of a ZFP Therapeutics.* If these potential products are not approved, we will not be able to commercialize those products. The FDA must approve any human therapeutic product before it 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 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 ICH guidelines and other applicable regulations;

- must meet requirements for institutional review board (IRB) oversight;

- must follow Institutional Biosafety Committee (IBC) and NIH RAC guidelines where applicable;

- must meet requirements for informed consent;

- are subject to continuing FDA oversight;

- may require large numbers of test subjects; and

- may be suspended by a 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 1 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 2 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 3 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.

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While we have stated our intention to file additional 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 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 ZFP Therapeutics 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 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 may be 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.

*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 thousands of gene sequences, we have not created ZFP TFs for all gene sequences and may not be able to 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 definitively 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 addition 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 gene disruption, gene correction or gene addition. Using this technique, Sangamo scientists have engineered ZFNs to cut DNA at a specific site within a target gene, and to rejoin the two ends of the break which frequently results in the disruption of the gene's function; to correct the adjacent sequences with newly synthesized DNA copied from an introduced DNA template, resulting in gene correction; or to specifically add a new DNA sequence into a target site. 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.

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*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 that 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. Should our technology fail to provide safe, effective, useful, or commercially viable approaches to the discovery and development of these products, this 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.

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*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 X-linked 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 2006, 2005 and 2004 were \$17.9 million, \$13.3 million and \$13.8 million, respectively. To date, our revenues have been generated from Enabling Technology collaborations, strategic partners, and federal government research grants. Since 2005, 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 included 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 strategic collaborations for ZFP Therapeutic product development. We may require significant time to secure 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 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.

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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 collaborations 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;
- gene therapy /cDNAs;
- antisense; and
- siRNA approaches

For our Enabling Technology Applications:

*For protein production:* gene amplification, meganucleases, insulator technology, mini-chromosomes

*For target validation:* antisense, siRNA; and

*For plant agriculture:* recombination approaches, mutagenesis approaches, meganucleases, mini-chromosomes;

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; and

greater experience in product development and in obtaining regulatory approvals and patent protection;

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.

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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, this 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. In June 2006, in an underwritten public offering and pursuant to an effective registration statement, we sold 3,100,000 shares of common stock at a public offering price of \$6.75 per share, resulting in net proceeds of approximately \$20.15 million after deducting underwriter's discount. In November 2005, we completed a registered direct offering to institutional and strategic investors for a total of 5,080,000 shares of common stock at a price of \$3.85 per share to the investors, resulting in net proceeds to Sangamo of approximately \$18.2 million. To date, we have generated all other revenue from Enabling Technology collaborations, strategic partnering agreements, federal government research grants and grants awarded by research foundations. As of December 31, 2006, we had an accumulated deficit of approximately \$128.3 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 or if we are unable to generate liquidity through equity financing, 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 2008, 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 \$4.10 to a high of \$8.00 during the year ended December 31, 2006, and a low of \$3.46 to a high of \$6.49 during the year ended December 31, 2005. 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:

- announcements by us or our partners providing updates on the progress or development status of ZFP Therapeutics;

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;

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additions or departures of key personnel;

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 relatively thinly traded, which means large transactions in our common stock may be difficult to conduct in a short time frame.* We have a relatively low volume of daily trades in our common stock on the Nasdaq Global Market. For example, the average daily trading volume in our common stock on the Nasdaq Global Market over the ten-day trading period prior to February 1, 2007 was approximately 432,500 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 75 full-time employees as of February 1, 2007 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. 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 that 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.

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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 do not control the prosecution of certain of the patent applications that we license from third parties; therefore, the patent applications may not be prosecuted exactly as we desire or 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, targeted integration and gene correction. On December 1, 2005 an interlocutory decision revoking this patent was issued by the European Patent Office. We have appealed this decision. If our appeal is ultimately unsuccessful, our ability to exclude potential competitors in the field of targeted recombination and gene correction in Europe may be limited. These developments apply only to Europe and do not affect our ability to practice our targeted recombination and gene correction programs 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.

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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.

*If we do not successfully commercialize certain ZFP Therapeutic programs relating to diabetic neuropathy under our agreement with JDRF, JDRF may have the right to continue to advance the program and we may lose control of the intellectual property generated in the collaboration and development of the product and may only receive a portion of the revenue generated if commercialization by JDRF is successful.* On October 24, 2006, we entered into a Research, Development and Commercialization Agreement with JDRF. Under the agreement and subject to its terms and conditions, including our achievement of certain milestones associated with our Phase 2 clinical trial of SB-509 for the treatment of diabetic neuropathy, JDRF will pay us up to \$3,000,000. We are obligated to cover the costs of the Phase 2 trial that are not covered by JDRF's grant.

Under the agreement, we are obligated to use commercially reasonable efforts to carry out the Phase 2 trial and, thereafter, to develop and commercialize, a product containing SB-509 for the treatment of diabetes and complications of diabetes. If we fail to satisfy these obligations, JDRF may have the right, subject to certain limitations, to obtain an exclusive, sublicensable license, to the intellectual property generated by us in the course of the Phase 2 trial, to make and commercialize products containing SB-509 for the treatment of diabetes and complications of diabetes. If JDRF obtains such a license, it is obligated to pay us a percentage of its revenues from product sales and sublicensing arrangements. If JDRF fails to satisfy its obligations to develop and commercialize a product containing SB-509 under the Agreement, then their license rights will terminate and we will receive a non-exclusive, fully paid license, for any intellectual property developed during JDRF's use of the license, to research, develop and commercialize products containing SB-509 for the treatment of diabetes and complications of diabetes. There is no guarantee that we will be successful in commercializing a product containing SB-509 in the future. If we fail to do so under the agreement with JDRF, we may lose control of the intellectual property generated in the development of the product and may only receive a portion of the revenue generated if commercialization by JDRF is successful.

*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.



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*Laws or public sentiment may limit the production of genetically modified agricultural products in the future, and these laws could reduce our partner's 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. Effective as of October 1, 2005, we entered into a Research License and Commercial Option Agreement with DAS. Under this agreement, we will provide DAS with access to our proprietary ZFP technology and the exclusive right to use our ZFP technology to modify the genomes or alter the nucleic acid or protein expression of plant cells, plants, or plant cell cultures. 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 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.

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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 of 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 16% 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 1B. Unresolved Staff Comments**

None.

**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 such facilities are sufficient for the foreseeable future.

**Item 3. Legal Proceedings**

We are not a party to any material legal proceeding.

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

Not applicable.

**Table of Contents****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 Global Market, Inc. under the symbol "SGMO" since our initial public offering on April 6, 2000.

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**

	<b>Price</b>	
	<b>High</b>	<b>Low</b>
Year ended December 31, 2005		
First Quarter	\$6.49	\$3.51
Second Quarter	\$4.20	\$3.46
Third Quarter	\$4.95	\$3.52
Fourth Quarter	\$4.86	\$3.71
Year ended December 31, 2006		
First Quarter	\$6.69	\$4.10
Second Quarter	\$7.73	\$4.59
Third Quarter	\$6.12	\$4.38
Fourth Quarter	\$8.00	\$4.93

**Holders**

As of February 22, 2007 there were approximately 88 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, one of our officers, 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.

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**Stock Performance Graph**

**COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\***

Among Sangamo Biosciences, Inc., The NASDAQ Composite Index

And the NASDAQ Biotechnology Index

\* This comparison is based on return assuming \$100 invested on December 31, 2001 in stock or index, assuming reinvestment of all dividends. Fiscal year ending December 31.

*The above Stock Performance Graph and related information shall not be deemed soliciting material or to be filed with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that the Company specifically incorporates it by reference into such filing.*

**Table of Contents****Item 6. Selected 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**

	<b>Year Ended December 31,</b>				
	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>(In thousands, except per share data)</b>				
<b>Statement of Operations Data:</b>					
Total revenues	\$ 7,885	\$ 2,484	\$ 1,315	\$ 2,579	\$ 4,343
Operating expenses:					
Research and development	21,527	10,909	11,184	9,937	12,671
General and administrative	7,087	5,323	4,781	4,411	4,856
Restructuring charge					371
Goodwill impairment					15,250
Patent impairment					2,760
Total operating expenses	28,614	16,232	15,965	14,348	35,908
Loss from operations	(20,729)	(13,748)	(14,650)	(11,769)	(31,565)
Interest income, net	2,411	850	620	752	1,366
Other income/(expense)	454	(395)	212	584	435
Net loss	\$ (17,864)	\$ (13,293)	\$ (13,818)	\$ (10,433)	\$ (29,764)
Basic and diluted net loss per common share	\$ (0.55)	\$ (0.51)	\$ (0.55)	\$ (0.42)	\$ (1.22)
Shares used in computing basic and diluted net loss per common share	32,502	25,855	25,126	24,811	24,493

	<b>Year Ended December 31,</b>				
	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>(In thousands)</b>				
<b>Allocation of Stock-Based Compensation to operating expenses:</b>					
Research and development	\$ 1,229	\$ 300	\$ 649	\$ 451	\$ 1,150
General and administrative	787	1	14	116	349
Total stock-based compensation	\$ 2,016	\$ 301	\$ 663	\$ 567	\$ 1,499

	<b>As of December 31,</b>				
	<b>2006</b>	<b>2005</b>	<b>2004</b>	<b>2003</b>	<b>2002</b>
	<b>(In thousands)</b>				

**Balance Sheet Data:**

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Cash, cash equivalents, marketable securities, and interest receivable	\$ 53,975	\$ 47,174	\$ 33,520	\$ 44,343	\$ 52,575
Working capital	49,856	41,668	32,028	43,714	52,115
Total assets	55,780	48,983	34,725	46,232	56,227
Accumulated deficit	(128,272)	(110,408)	(97,115)	(83,297)	(72,864)
Total stockholders' equity	48,705	37,814	32,377	44,661	54,246

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**Table of Contents****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 Risk Factors described in Part I, Item 1A. 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, 2006, 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, 2006, we had an accumulated deficit of \$128.3 million.

Our revenues have consisted primarily of revenues from our corporate partners for ZFP TFs and ZFNs, 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 2006, we have continued to place more emphasis on higher-value therapeutic product development and related strategic partnerships and less emphasis on our Enabling Technology 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 subject to higher financial risk by increasing expenses associated with product development. We filed an Investigational New Drug (IND) application with the U.S. Food and Drug Administration (FDA) and initiated a Phase 2 clinical trial of a ZFP Therapeutic in patients with diabetic neuropathy during the fourth quarter of 2006. 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 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, stock-based compensation expense, pre-clinical and clinical studies, laboratory supplies, allocated facilities costs, subcontracted research expenses, and expenses for trademark registration and technology licenses. Research and development costs incurred in connection with collaborator-funded activities 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. 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. Additionally, in order to develop ZFP TFs and ZFNs 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, patent prosecution expenses, 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.

**Table of Contents****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 and Enabling Technology collaborations 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 typically received on a quarterly basis and are subject to the issuing agency's right of audit.

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 criterion is considered separately for each of the separate units of accounting.

***STOCK-BASED COMPENSATION***

Prior to January 1, 2006, the Company accounted for our stock-based employee compensation arrangements under the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees (APB No. 25), as allowed by SFAS No. 123, Accounting for Stock-based Compensation (SFAS No. 123), as amended by SFAS No. 148, Accounting for Stock-Based Compensation Transition and Disclosure (SFAS No. 148). As a result, no expense was recognized for options to purchase our common stock that were granted with an exercise price equal to fair market value at the date of grant and no expense was recognized in connection with purchases under our employee stock purchase plan for the years ended December 31, 2005 or 2004. In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (revised 2004) Share-Based Payment (SFAS No. 123R), which replaces SFAS No. 123 and supersedes APB No. 25. SFAS No. 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values beginning with the first interim or annual period after June 15, 2005. Subsequent to the effective date, the pro forma disclosures previously permitted under SFAS No. 123 are no longer an alternative to financial statement recognition. Effective January 1, 2006, the Company has adopted SFAS No. 123R using the modified prospective method. Under this method, compensation cost recognized includes: (a) compensation cost for all share-based payments granted prior to, but not yet vested as of December 31, 2005, based on the grant-date fair value estimated in accordance with the original provisions of SFAS No. 123 amortized on an accelerated basis over the options' vesting period, and (b) compensation cost for all share-based payments granted subsequent to December 31, 2005, based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123R amortized on a straight-line basis over the options' vesting period. Results for prior periods have not been restated. As a result of adopting SFAS No. 123R on January 1, 2006, the net loss is greater by \$1.98 million for year ended December 31, 2006 than had the Company continued to account for stock-based employee compensation under APB

No. 25. Basic and diluted net loss per share for year ended December 31, 2006 is \$0.06 greater than if the Company had continued to account for stock-based compensation under APB No. 25. The adoption of SFAS No. 123R had no impact on cash flows from operations or financing.

On November 10, 2005, the Financial Accounting Standards Board (FASB) issued FASB Staff Position No. FAS 123(R)-3, Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards. We have elected to adopt the

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alternative transition method provided in the FASB Staff Position for calculating the tax effects (if any) of stock-based compensation expense pursuant to SFAS 123R. The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool (APIC pool) related to the tax effects of employee stock-based compensation, and to determine the subsequent impact to the APIC pool and the consolidated statements of operations and cash flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of SFAS 123R.

**Results of Operations***Years Ended December 31, 2006, 2005 and 2004**Total Revenues*

	Year Ended December 31,							
	2006	2005	Change	% Change	2005	2004	Change	% Change
	(In thousands, except percentage values)							
Revenues:								
Collaboration agreements	\$ 6,625	\$ 1,832	\$ 4,793	262%	\$ 1,832	\$ 947	\$ 885	93%
Federal government research grants	1,260	652	608	93%	652	368	284	77%
Total revenues	\$ 7,885	\$ 2,484	\$ 5,401	217%	\$ 2,484	\$ 1,315	\$ 1,169	89%

We are increasing the emphasis of our research and development activities on ZFP Therapeutics. Even with this change in resource allocation, we anticipate increasing revenues over the next several years primarily related to our Research License and Commercial Option Agreement with Dow AgroSciences LLC ( DAS ), a wholly owned indirect subsidiary of Dow Chemical Corporation.

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 \$6.6 million in 2006, compared to \$1.8 million in 2005, and \$947,000 in 2004. The increase in 2006 from 2005 was principally attributable to increased revenues of approximately \$4.6 million in connection with our Research License and Commercial Option Agreement with DAS and \$235,000 in connection with our collaboration in the field of regenerative medicine with LifeScan. The increase in 2005 from 2004 was principally attributable to increased revenues of approximately \$748,000 related to our research collaboration agreement with Pfizer, increased revenues of approximately \$677,000 in connection with our Research License and Commercial Option Agreement with DAS, and increased revenues of approximately \$280,000 in connection with our collaboration in the field of regenerative medicine with LifeScan. These increases were partially offset by decreased revenues of \$615,000 from our therapeutics partnership with Edwards Lifesciences Corporation ( Edwards ), as well as lower revenues of approximately \$100,000 associated with other Enabling Technology collaborations. The decreased revenue from Edwards is due to the submission of the first IND by Edwards for a licensed product under the agreement with Sangamo. Federal government research grant revenues were \$1.3 million in 2006, \$652,000 in 2005 and \$368,000 in 2004. The increase in 2006 from 2005 was primarily attributable to increased revenue of \$456,000 in connection with our Advanced Technology Program grant awarded by the National Institute of Standards and Technology, \$176,000 in connection with our Cystic Fibrosis grant awarded by Cystic Fibrosis Foundation and \$100,000 in connection with our ZFN-driven Gene Disruption of CCR5 as a Potential Treatment of AIDS grant awarded by the National Institutes of Health. These increases were partially offset by decreased revenues of \$118,000 from our federal government grant associated with sickle cell. The increase in 2005 from 2004 was primarily attributable to increased revenue of \$352,000 in connection with our Advanced Technology Program grant awarded by the National Institute of Standards and Technology. During the fourth quarter of 2005, the Company concluded that, since the inception, revenues related to this grant had been under-recorded by \$254,000. A one-time adjustment for this amount was recorded during the

fourth quarter of 2005 and is the primary reason for the increased federal government research grant revenues in 2005 as compared to 2004. We plan to continue to apply for federal government research grants.

**Table of Contents***Operating Expenses*

	Year Ended December 31,							
	2006	2005	Change	% Change	2005	2004	Change	% Change
	(In thousands, except percentage values)							
Operating expenses:								
Research and development	\$ 21,527	\$ 10,909	\$ 10,618	97%	\$ 10,909	\$ 11,184	\$ (275)	(2)%
General and administrative	7,087	5,323	1,764	33%	5,323	4,781	542	11%
Total operating expenses	\$ 28,614	\$ 16,232	\$ 12,382	76%	\$ 16,232	\$ 15,965	\$ 267	2%

*Research and development expenses*

Research and development expenses have consisted primarily of salaries and related personnel expenses, stock-based compensation expense, laboratory supplies, pre-clinical and clinical studies, allocated facilities costs, subcontracted research expenses and expenses for 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 \$21.5 million in 2006, compared to \$10.9 million in 2005 and \$11.2 million in 2004. The increase of \$10.6 million in 2006 from 2005 was principally due to increased expenses associated with the acquisition of all assets in Edwards ZFP therapeutic angiogenesis program valued at \$5.8 million, \$1.2 million of stock-based compensation due to adoption of SFAS No. 123R, increased expenses for laboratory supplies of approximately \$1.1 million, increased expenses associated with diabetic neuropathy-related clinical studies of \$1.1 million, increased expenses for salaries and related benefits of \$963,000 due to increased headcount, increased consulting expenses of approximately \$392,000 and increased expenses associated with pre-clinical studies of \$135,000. The decrease of \$275,000 in 2005 from 2004 was principally due to decreased expenses related to research licenses, lower non-employee stock-based compensation expense of \$349,000, decreased clinical-related expenses of \$288,000, primarily related to our diabetic neuropathy program, and decreased allocated facility expenses of \$286,000. The decrease is partially offset increased expenses for laboratory supplies of approximately \$466,000, increased external research expenses of approximately \$406,000 and increased consulting expenses of approximately \$209,000.

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-engineered cell lines, protein production and ZFP TFs and ZFNs 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 technology to modify the genomes or alter the protein expression of plant cells, plants, or plant cell cultures	Dow AgroSciences	Research
ZFP-engineered cell lines for the manufacture of protein pharmaceuticals	Pfizer	Research/Marketing



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

**Internal Programs**

<b>Program</b>	<b>Stage</b>
ZFP Therapeutics	Clinical/Preclinical/Research
ZFP TF-engineered cell lines for the manufacture of protein pharmaceuticals	Research

Due to the early stage of our various internal research and development projects, we do 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 Risk Factors

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, stock-based compensation expenses, professional fees, allocated facilities costs, expenses for patent prosecution 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 \$7.1 million during 2006, \$5.3 million in 2005 and \$4.8 million in 2004. The increase of \$1.8 million in 2006 was principally due to increased professional services expenses of approximately \$961,000, primarily patent prosecution-related, and \$787,000 related to stock-based compensation due to the adoption of SFAS No. 123R. The increase of \$542,000 in 2005 was principally due to increased salary and benefit expenses of approximately \$394,000 and increased professional services expenses of \$299,000, primarily patent prosecution-related. This increased was partially offset by decreasing corporate communication expenses of \$108,000.

*Interest income, net*

	<b>Year Ended December 31,</b>							
	<b>2006</b>	<b>2005</b>	<b>Change</b>	<b>%</b>	<b>2005</b>	<b>2004</b>	<b>Change</b>	<b>%</b>
	<b>(In thousands, except percentage values)</b>							
Interest income, net	\$2,411	\$850	\$1,561	184%	\$850	\$620	\$230	37%

Net interest income was \$2.4 million in 2006, as compared to \$850,000 in 2005, and \$620,000 in 2004. The increase of \$1.6 million in 2006 from 2005 was primarily related to higher interest income earned on higher average cash and investment balances from the June 2006 equity financing. The increase in 2005 from 2004 is related to interest earned on higher average cash and investment balances from November 2005 equity financing.

*Other income/(expense)*

	<b>Year Ended December 31,</b>							
	<b>2006</b>	<b>2005</b>	<b>Change</b>	<b>%</b>	<b>2005</b>	<b>2004</b>	<b>Change</b>	<b>%</b>
	<b>(In thousands, except percentage values)</b>							
Other income/(expense)	\$454	\$(395)	\$849	215%	\$(395)	\$212	\$(607)	(286)%

During 2006, other income of \$454,000 was principally comprised of a net gain on foreign currency translation. During 2005, other expense of \$395,000 was comprised of a net loss on foreign currency translation of \$374,000 and



other than temporary loss on our marketable securities of \$21,000. 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, partially offset by other than temporary loss on our marketable securities of \$71,000. The foreign currency translation gain/loss relates to foreign currency cash balance held by the foreign subsidiary.

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We incurred net operating losses in 2006, 2005 and 2004, and consequently 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, 2006, we had cash, cash equivalents, investments and interest receivable totaling \$54.0 million.

Net cash used in operating activities was \$14.5 million in 2006, \$4.0 million in 2005, and \$10.1 million in 2004. In all periods, net cash used in operating activities was primarily due to funding of net operating losses. During 2006, the use of cash related to our net operating loss of \$17.9 million, net of non-cash charges of \$7.1 million and net decrease of \$3.7 million in net operating assets and liabilities. Non-cash charges include \$5.8 million related to issuance of common stock for Edwards asset purchase, \$2.0 million related to stock based compensation expense related to FAS123R and amortization of premium/discount on marketable securities of \$857,000. The net decreases in operating assets and liabilities are mainly attributable to decrease in deferred revenue of \$4.2 million partially offset by net decreases in asset balances of \$370,000. During 2005, the use of cash related to our net operating loss of \$13.3 million net of non-cash charges of \$810,000 and net increases in operating assets and liabilities of \$8.4 million. Non-cash charges include amortization of premium/discount on marketable securities of \$214,000 and \$301,000 stock based compensation expense. The net increases in operating assets and liabilities is due to net increase in liability balances of \$8.8 million, principally due to an increase in deferred revenue of \$7.8 million, primarily related to the receipt of a license payment of \$7.5 million during the fourth quarter of 2005 per the terms of the Research License and Commercial Option Agreement with DAS. During 2004, the use of cash related to the net operating loss of \$13.8 million, partially offset by non-cash charges and net increases in asset balances of \$2.8 million and by amortization of premium/discount on marketable securities of \$868,000.

Net cash provided by (used in) investing activities was \$(12.2) million in 2006, \$(4.4) million in 2005 and \$8.4 million in 2004. 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 \$20.9 million in 2006, \$18.4 million in 2005 and \$553,000 in 2004. In June 2006, in an underwritten public offering and pursuant to an effective registration statement, we sold 3,100,000 shares of common stock at a public offering price of \$6.75 per share, resulting in net proceeds of approximately \$20.15 million after deducting underwriter's discount. During 2005, the company completed a registered direct offering to institutional and strategic investors for a total of 5,080,000 shares of common stock at a price of \$3.85 per share to the investors, resulting in net proceeds to Sangamo of approximately \$18.2 million. All other cash provided by financing activities for 2006, 2005 and 2004 was solely related to proceeds from issuance of common stock related to stock options exercises.

While we expect our rate of cash usage to increase in the future, in particular, to support 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 2008. 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, 2006, Sangamo had net operating loss carryforwards for federal income tax purposes of approximately \$79.7 million, which expire in the years 2010 through 2026. The Company also has state net operating loss carryforwards of approximately \$50.9 million, which expire in the years 2007 through 2016. The Company also has federal and state research tax credit carryforwards of \$2.6 million and \$1.9 million, respectively. The federal research credits will begin to expire in the year 2018 through 2026 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.



**Table of Contents****Contractual Obligations and Commercial Commitments**

As of December 31, 2006 we had contractual obligations and commercial commitments as follows (in thousands):

	Total	Payments Due by Period			
		Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Contractual Obligations					
Operating leases	\$ 3,705	\$ 445	\$ 1,402	\$ 1,509	\$ 349
License obligations	877	213	664		
Total contractual obligations	\$ 4,582	\$ 658	\$ 2,066	\$ 1,509	\$ 349

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

**Recent Accounting Pronouncements**

In September 2006 the FASB issued FASB Statement No. 157, Fair Value Measurements, or SFAS 157. The standard provides guidance for using fair value to measure assets and liabilities. The standard also responds to investors' requests for expanded information about the extent to which companies measure assets and liabilities at fair value, the information used to measure fair value, and the effect of fair value measurements on earnings. The standard applies whenever other standards require or permit assets or liabilities to be measured at fair value. The standard does not expand the use of fair value in any new circumstances. SFAS 157 must be adopted prospectively as of the beginning of the year it is initially applied. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. We are still evaluating what impact, if any, the adoption of this standard will have on our financial position or results of operations.

In June 2006, the FASB issued Financial Interpretation No. 48, Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109 (FIN 48), which is a change in accounting for income taxes. FIN 48 specifies how tax benefits for uncertain tax positions are to be recognized, measured, and derecognized in financial statements; requires certain disclosures of uncertain tax matters; specifies how reserves for uncertain tax positions should be classified on the balance sheet; and provides transition and interim period guidance, among other provisions. FIN 48 is effective for fiscal years beginning after December 15, 2006. We are currently evaluating the impact of FIN 48 on our consolidated financial position, results of operations, and cash flows.

**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, 2006, 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 \$454,000 in 2006, loss of \$374,000 and gain of \$261,000 on foreign currency translation in 2005 and 2004, respectively.

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

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**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, 2006 and 2005, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2006. 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, 2006 and 2005, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 2 to the consolidated financial statements, in 2006 Sangamo BioSciences, Inc. changed its method of accounting for stock-based compensation in accordance with guidance provided in Statement of Financial Accounting Standards No. 123(R), Share-Based Payment.

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, 2006, 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 March 1, 2007 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Palo Alto, California  
March 1, 2007

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**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, that Sangamo BioSciences, Inc. maintained effective internal control over financial reporting as of December 31, 2006, 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, 2006, 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, 2006, 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, 2006 and 2005, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2006 and our report dated March 1, 2007 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Palo Alto, California  
March 1, 2007

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**SANGAMO BIOSCIENCES, INC.  
CONSOLIDATED BALANCE SHEETS**

	December 31,	
	2006	2005
	(In thousands, except share and per share amounts)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 12,702	\$ 18,507
Marketable securities	41,218	28,449
Interest receivable	55	218
Accounts receivable	487	971
Prepaid expenses	594	317
 Total current assets	 55,056	 48,462
Property and equipment, net	675	472
Other assets	49	49
 Total assets	 \$ 55,780	 \$ 48,983
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 1,726	\$ 1,598
Accrued compensation and employee benefits	878	933
Deferred revenue	2,596	4,263
 Total current liabilities	 5,200	 6,794
Deferred revenue, non-current portion	1,875	4,375
 Total liabilities	 7,075	 11,169
 Commitments and contingencies		
Stockholders' equity:		
Common stock, \$0.01 par value; 80,000,000 shares authorized, 35,045,398 and 30,570,912 shares issued and outstanding at December 31, 2006 and 2005, respectively	350	306
Additional paid-in capital	176,513	147,856
Accumulated deficit	(128,272)	(110,408)
Accumulated other comprehensive income	114	60
 Total stockholders' equity	 48,705	 37,814
 Total liabilities and stockholders' equity	 \$ 55,780	 \$ 48,983

See accompanying Notes to Consolidated Financial Statements.



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**SANGAMO BIOSCIENCES, INC.  
CONSOLIDATED STATEMENTS OF OPERATIONS**

	Year Ended December 31,		
	2006	2005	2004
	(In thousands, except per share amounts)		
Revenues:			
Collaboration agreements	\$ 6,625	\$ 1,832	\$ 947
Federal government research grants	1,260	652	368
Total revenues	7,885	2,484	1,315
Operating expenses:			
Research and development	21,527	10,909	11,184
General and administrative	7,087	5,323	4,781
Total operating expenses	28,614	16,232	15,965
Loss from operations	(20,729)	(13,748)	(14,650)
Interest income, net	2,411	850	620
Other income/(expense)	454	(395)	212
Net loss	\$ (17,864)	\$ (13,293)	\$ (13,818)
Basic and diluted net loss per share	\$ (0.55)	\$ (0.51)	\$ (0.55)
Shares used in computing basic and diluted net loss per share	32,502	25,855	25,126

See accompanying Notes to Consolidated Financial Statements.

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**SANGAMO BIOSCIENCES, INC.**  
**CONSOLIDATED STATEMENT OF STOCKHOLDERS EQUITY**

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Deferred Stock Compensation	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders Equity
Balances at December 31, 2003	24,954,243	250	127,677	(1)	(83,297)	32	44,661
Issuance of common stock upon exercise of options, net of repurchases	120,740	2	292				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	1	258				259
Amortization of deferred stock compensation				1			1
Non-employee stock-based compensation			662				662
Comprehensive loss:							
Decrease in unrealized gain on marketable securities Other than temporary loss on marketable securities						(93)	(93)
						71	71
Net loss					(13,818)		(13,818)
Comprehensive loss							(13,840)
	25,271,059	253	129,229		(97,115)	10	32,377

Balances at  
December 31, 2004

Issuance of common stock in connection with registered direct offering and upon exercise of stock options	5,218,239	52	18,063			18,115
Issuance of common stock under employee stock purchase plan	81,614	1	263			264
Non-employee stock-based compensation			301			301
Comprehensive loss:						
Increase in unrealized gain on marketable securities					29	29
Other than temporary loss on marketable securities					21	21
Net loss				(13,293)		(13,293)
Comprehensive loss						(13,301)
Balances at December 31, 2005	30,570,912	306	147,856	(110,408)	60	37,814
Issuance of common stock in connection with registered direct offering and upon exercise of stock options	3,374,896	33	20,523			20,556
Issuance of common stock in connection with technologies purchase agreement	1,000,000	10	5,770			5,780

Issuance of common stock under employee stock purchase plan	99,590	1	348				349
Stock-based compensation			2,016				2,016
Comprehensive loss:							
Increase in unrealized gain on marketable securities						54	54
Net loss				(17,864)			(17,864)
Comprehensive loss							(17,810)
Balances at December 31, 2006	35,045,398	\$ 350	\$ 176,513	\$	\$ (128,272)	\$	114 \$ 48,705

See accompanying Notes to Consolidated Financial Statements.

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**SANGAMO BIOSCIENCES, INC.**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	Year Ended December 31,		
	2006	2005	2004
	(In thousands)		
<b>Operating activities:</b>			
Net loss	\$ (17,864)	\$ (13,293)	\$ (13,818)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	171	274	611
Amortization of premium/discount on marketable securities	(857)	214	868
Realized loss on marketable securities		21	71
Issuance of common stock in connection with technologies purchase agreement	5,780		340
Stock-based compensation	2,016	301	663
Changes in operating assets and liabilities:			
Interest receivable	163	42	228
Accounts receivable	484	(402)	89
Prepaid expenses and other assets	(277)	(48)	7
Accounts payable and accrued liabilities	192	757	91
Accrued compensation and employee benefits	(55)	276	21
Deferred revenue	(4,231)	7,789	665
Net cash used in operating activities	(14,478)	(4,069)	(10,164)
<b>Investing activities:</b>			
Purchases of marketable securities	(67,135)	(33,518)	(20,702)
Maturities of marketable securities	55,277	29,518	29,160
Purchases of property and equipment	(374)	(428)	(24)
Net cash provided by/(used in) investing activities	(12,232)	(4,428)	8,434
<b>Financing activities:</b>			
Proceeds from issuance of common stock	20,905	18,379	553
Net cash provided by financing activities	20,905	18,379	553
Net increase/(decrease) in cash and cash equivalents	(5,805)	9,882	(1,177)
Cash and cash equivalents, beginning of period	18,507	8,626	9,803
Cash and cash equivalents, end of period	\$ 12,702	\$ 18,507	\$ 8,626

See accompanying Notes to Consolidated Financial Statements.

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**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 gene regulation and gene modification. Our gene regulation and gene modification 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 enhancement of pharmaceutical protein production. 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 Enabling Technology 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, 2006, along with expected revenues from Enabling Technology collaborations and strategic partnerships, will be adequate to fund its operations through 2008. 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 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 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.

Certain reclassifications of prior period amounts have been made to the Condensed Consolidated Financial Statements to conform to the current period presentation, including the reclassification of patent prosecution expenses to general and administrative expense from research and development expense. The reclassifications were immaterial and had no impact on the Company s net loss or accumulated deficit.

***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 \$12.7 million and \$18.5 million at December 31, 2006 and 2005, 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, with the unrealized holding gains and losses are included in accumulated other comprehensive income. The Company evaluates the declines in market value for potential impairment if the declines results in a value below costs and is determined to be other than temporary. Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are included in other income/(expense),net, which is determined using the specific identification method. The Company recorded other-than-temporary losses on its investments of \$0, \$21,000 and \$71,000 for 2006, 2005 and 2004, respectively.

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

	Amortized Cost	Gross Unrealized Gains/ (Losses)	Estimated Fair Value
<b>December 31, 2006</b>			
Corporate debt investments:			
Maturing within 1 year	41,203	15	41,218
Total corporate investments	41,203	15	41,218
Total available-for-sale investments	\$ 41,203	\$ 15	\$ 41,218
<b>December 31, 2005</b>			
U.S. government investments:			
Maturing within 1 year	\$ 3,253	\$ (6)	\$ 3,247
Total government investments	3,253	(6)	3,247
Corporate debt investments:			
Maturing within 1 year	25,234	(32)	25,202
Total corporate investments	25,234	(32)	25,202
Total available-for-sale investments	\$ 28,487	\$ (38)	\$ 28,449

***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***

The Company's policy regarding long-lived assets is to evaluate the recoverability of its assets when the facts and circumstances suggest that the assets may be impaired. This assessment of fair value is performed based on the estimated undiscounted cash flows compared to the carrying value of the assets. If the future cash flows (undiscounted and without interest charges) are less than the carrying value, a write-down would be recorded to reduce the related asset to its estimated fair value.

***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 remeasured at the exchange rates in effect at the balance sheet date. Foreign currency transaction gains and losses are recorded in the statements of operations and a

gain of \$454,000 was recorded during 2006. Foreign currency translation loss of \$374,000 was recorded during 2005 and a foreign currency translation gain of \$261,000 was recorded during 2004.

***Comprehensive Loss***

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Comprehensive loss for the years ended December 31, 2006, 2005 and 2004 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 marketable securities and foreign currency translation adjustments.



**Table of Contents*****Revenue Recognition***

In accordance with Staff Accounting Bulletin No. 104, Revenue Recognition, revenue from research activities made under strategic partnering agreements and Enabling Technology collaborations 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.

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, stock-based compensation, pre-clinical and clinical studies, facility costs, laboratory 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***

Prior to January 1, 2006, the Company accounted for its stock-based employee compensation arrangements under the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees (APB No. 25), as allowed by SFAS No. 123, Accounting for Stock-based Compensation (SFAS No. 123), as amended by SFAS No. 148, Accounting for Stock-Based Compensation—Transition and Disclosure (SFAS No. 148). As a result, no expense was recognized for options to purchase our common stock that were granted with an exercise price equal to fair market value at the date of grant and no expense was recognized in connection with purchases under its employee stock purchase plan for the years ended December 31, 2005 or 2004. In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (revised 2004) Share-Based Payment (SFAS No. 123R), which replaces SFAS No. 123 and supersedes APB No. 25. SFAS No. 123R requires all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values beginning with the first interim or annual period after June 15, 2005. Subsequent to the effective date, the pro forma disclosures previously permitted under SFAS No. 123 are no longer an alternative to financial statement recognition. Effective January 1, 2006, the Company has adopted SFAS No. 123R using the modified prospective method. Under this method, compensation cost recognized includes: (a) compensation cost for all share-based payments granted prior to, but not yet vested as of December 31, 2005, based on the grant date fair value estimated in accordance with the original provisions of SFAS No. 123 amortized on an accelerated basis over the options' vesting period, and (b) compensation cost for all share-based payments granted subsequent to December 31, 2005, based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123R amortized on a straight-line basis over the options' vesting period. Results for prior periods have not been restated. As a result of adopting SFAS No. 123R on January 1, 2006, the net loss is greater by \$1.98 million for the year ended December 31, 2006 than had the Company continued to account for stock-based employee compensation under APB No. 25. Basic

and diluted net loss per share for the year ended December 31, 2006 are \$0.06 greater than if the Company had continued to account for stock-based compensation under APB No. 25. The adoption of SFAS No. 123R had no impact on cash flows from operations or financing. See Note 2, Stock-Based Compensation for further discussion of employee stock-based compensation.

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In November 2005, the FASB issued FSP No. 123R-3, Transition Election Related to Accounting for the Tax Effects of Share-Based Payment Awards. We have adopted the simplified method to calculate the beginning balance of the additional paid-in-capital ( APIC ) pool of the excess tax benefit, and to determine the subsequent impact on the APIC pool and Condensed Consolidated Statements of Cash Flows of the tax effects of employee stock-based compensation awards that were outstanding upon our adoption of FAS 123R.

**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. Diluted net loss per share includes the impact of potentially dilutive securities. Stock options represent the Company's only potentially dilutive securities and were anti-dilutive for all years presented. Dilutive stock options were 1,522,496, 934,405 and 989,803 for 2006, 2005 and 2004, respectively. The following table presents the calculation of historical basic and diluted net loss per common share (in thousands, except per share data):

	<b>Year Ended December 31,</b>		
	<b>2006</b>	<b>2005</b>	<b>2004</b>
Net loss	\$ (17,864)	\$ (13,293)	\$ (13,818)
Basic and diluted:			
Weighted-average shares of common stock outstanding	32,502	25,855	25,126
Shares used in computing basic and diluted net loss per share	32,502	25,855	25,126
Basic and diluted net loss per share	\$ (0.55)	\$ (0.51)	\$ (0.55)

**Recent Accounting Pronouncements**

In September 2006 the FASB issued FASB Statement No. 157, Fair Value Measurements, or SFAS 157. The standard provides guidance for using fair value to measure assets and liabilities. The standard also responds to investors' requests for expanded information about the extent to which companies measure assets and liabilities at fair value, the information used to measure fair value, and the effect of fair value measurements on earnings. The standard applies whenever other standards require or permit assets or liabilities to be measured at fair value. The standard does not expand the use of fair value in any new circumstances. SFAS 157 must be adopted prospectively as of the beginning of the year it is initially applied. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. The Company is still evaluating what impact, if any; the adoption of this standard will have on its financial position or results of operations.

In June 2006, the FASB issued Financial Interpretation No. 48, Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109 ( FIN 48 ), which is a change in accounting for income taxes. FIN 48 specifies how tax benefits for uncertain tax positions are to be recognized, measured, and derecognized in financial statements; requires certain disclosures of uncertain tax matters; specifies how reserves for uncertain tax positions should be classified on the balance sheet; and provides transition and interim period guidance, among other provisions. FIN 48 is effective for fiscal years beginning after December 15, 2006. The Company is currently evaluating the impact of FIN 48 on our consolidated financial position, results of operations, and cash flows.



**Table of Contents****2. Stock-Based Compensation**

On January 1, 2006, the Company adopted FAS 123R, which supersedes our previous accounting under APB 25. FAS 123R requires the recognition of compensation expense, using a fair-value based method, for costs related to all share-based payments including stock options and stock issued under its employee stock purchase plan. Under FAS 123R, the value of the portion of the award that is ultimately expected to vest is recognized as expense on a straight-line basis over the requisite service periods in its Consolidated Statements of Operations.

The following table shows total stock-based compensation expense recognized in the consolidated statement of operations for the year ended December 31, 2006, 2005 and 2004 (in thousands):

	<b>Year ended December 31,</b>		
	<b>2006</b>	<b>2005</b>	<b>2004</b>
Research and development	\$ 1,229	\$ 300	\$ 649
General and administrative	787	1	14
Total stock-based compensation expense	\$ 2,016	\$ 301	\$ 663

**Adoption of FAS 123R**

Employee stock-based compensation expense recognized in 2006 was calculated based on awards ultimately expected to vest and has been reduced for estimated forfeitures. FAS 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. A forfeiture rate of 10% is applied to the stock-based compensation expense, determined through historical experience of employee stock option exercises. The following table shows total employee stock-based compensation expense (see Note 6 for types of stock-based employee arrangements) recognized under SFAS No.123R included in the consolidated statements of operations for year ended December 31, 2006 (in thousands):

Costs and expenses:		
Research and development		\$ 1,196
General and administrative		787
Total stock-based compensation expense		\$ 1,983

There was no capitalized stock-based employee compensation cost as of December 31, 2006. There were no recognized tax benefits during the year ended December 31, 2006.

As of December 31, 2006, total compensation cost related to nonvested stock options to be recognized in future periods was \$3.87 million, which is expected to be expensed over a weighted average period of 48 months.

**Pro Forma Information for Period Prior to Adoption of FAS 123R**

The following table illustrates the effect on net loss and net loss per share had the Company applied the fair value recognition provisions of SFAS No. 123 to account for its employee stock option and employee stock purchase plans for the year ended December 31, 2005 and 2004 because stock-based employee compensation was not accounted for using the fair value recognition method during that period. For purposes of pro forma disclosure, the estimated fair value of the stock awards, as prescribed by SFAS No. 123, is amortized to expense over the vesting period of such awards (in thousands, except per share data).

	<b>Year Ended December 31,</b>	
	<b>2005 (1)</b>	<b>2004</b>
Net loss:		
As reported	\$ (13,293)	\$ (13,818)
Less: stock-based compensation expense determined under the fair value based method	(2,560)	(2,276)

Pro forma net loss	\$ (15,853)	\$ (16,094)
Basic and diluted net loss per share:		
As reported	\$ (0.51)	\$ (0.55)
Pro forma	\$ (0.61)	\$ (0.64)

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- (1) During the preparation of footnotes to the consolidated financial statements for its quarterly and year end filings during fiscal year 2006, the Company determined that the calculation of its net loss pro forma reported under SFAS No. 123 for fiscal year 2004, as reported, did not appropriately reflect the effect of SFAS No. 123 for certain options granted prior to January 1, 2006. Accordingly, the amount of net loss pro forma reported under SFAS No. 123 for 2004 presented in the table above has been revised, resulting in an decrease in the previously reported amount of pro forma net loss of \$2,021,000 or \$0.08 per basic and diluted share. This revision had no

effect on its  
previously  
reported  
consolidated  
results of  
operations or  
financial  
condition.

### Valuation Assumptions

The employee stock-based compensation expense recognized under FAS123R and presented in the pro forma disclosure required under FAS123 was determined using the Black Scholes option valuation model. Option valuation models require the input of subjective assumptions and these assumptions can vary over time.

The Company primarily bases its determination of expected volatility through its assessment of the historical volatility of its Common Stock. The Company does not believe that it is able to rely on its historical exercise and post-vested termination activity to provide accurate data for estimating our expected term for use in determining the fair value of these options. Therefore, as allowed by Staff Accounting Bulletin (SAB) No. 107, *Share-Based Payment*, the Company has opted to use the simplified method for estimating its expected term equal to the midpoint between the vesting period and the contractual term.

The weighted average assumptions used for estimating the fair value of the employee stock options are as follows:

	Year Ended December 31,		
	2006	2005	2004
Risk-free interest rate	4.7-5.1%	3.7-4.5%	2.8-3.9%
Expected life of option	6.25 yrs	6.81 yrs	7.41 yrs
Expected dividend yield of stock	0%	0%	0%
Expected volatility	0.94-0.97	1.0-1.05	1.06-1.12

The weighted average assumptions used for estimating the fair value of the employees purchase rights are as follows:

	Year Ended December 31,		
	2006	2005	2004
Risk-free interest rate	2.5-5.1%	1.3-2.9%	1.3-3.5%
Expected life of option	.5-2.0 yrs	.5-2.0 yrs	.5-2.0 yrs
Expected dividend yield of stock	0%	0%	0%
Expected volatility	0.41-0.98	0.70-0.78	0.68-0.99

Sangamo granted 10,000 nonqualified common stock options to consultants during 2006. The Company granted 15,000 and 10,000 nonqualified stock option to consultants in 2005 and 2004, respectively. Such options are included in the option tables disclosed in Note 6. The options generally vest over four years at a rate of 25 percent one year from grant date and one-thirty-sixth per month thereafter and expire ten years after the grant date. Total nonqualified stock-based compensation expense included in the total stock-based compensation expenses was \$33,000, \$301,000 and \$662,000 in 2006, 2005 and 2004, respectively. The fair value of these options was determined using the Black-Scholes Merton model.



**Table of Contents****3. Major Customers, Partnerships and Strategic Alliances**

In December 2006, Sangamo entered into an Asset Purchase Agreement with Edwards Lifesciences LLC, to acquire all of the assets in Edwards' ZFP TF angiogenesis program, including regulatory filings, clinical data, and Good Manufacturing Practice (GMP) product in exchange for one million shares of its unregistered Common Stock and certain royalties. This transaction was valued at \$5.8 million, based on the fair value of its publicly traded stock at the closing date of the transaction less a discount for lack of marketability in the unregistered Common Stock and recorded as a research and development expense in the Consolidated Statement of Operations. Under the agreement, Sangamo agreed to pay Edwards royalties generated by the sales of certain human therapeutic products, including products to treat ischemic cardiovascular and vascular disease and diabetic neuropathy, based upon ZFP TF activation of the VEGF gene, the first of which product is not expected to be available for sale before 2012. The amount of royalties payable to Edwards is equal to (i) five percent (5%) of the net sales of each such product sold by Sangamo and (ii) the greater of (a) five percent (5%) of the net sales of each such product sold by a sublicensee of Sangamo or (b) twenty-five percent (25%) of the royalty payment received by Sangamo from its sublicensee on account of such product sold by such sublicensee; provided that total royalties paid by Sangamo under the Agreement shall not exceed \$20 million in any calendar year or \$100 million in the aggregate. In connection with this transaction, Sangamo and Edwards terminated the prior agreements entered into January 2000.

On October 26, 2006, Sangamo announced a partnership with the Juvenile Diabetes Research Foundation International (JDRF) to provide financial support of Sangamo's upcoming Phase 2 human clinical studies of SB-509, a ZFP Therapeutic that is in development for the treatment of diabetic neuropathy. Under the agreement with JDRF and subject to its terms and conditions, including the Company's achievement of certain milestones associated with the Company's Phase 2 clinical trial of SB-509 for the treatment of diabetic neuropathy, JDRF will pay the Company an aggregate amount up to \$3.0 million. After the first commercial launch of SB-509 in a major market, JDRF has the right to receive, subject to certain limitations, annual payments from Sangamo, until such time when the total amount paid to JDRF, including payments made on account of the licensing arrangements, equals three times the amount received by Sangamo from JDRF. The Company is obligated to cover all costs of the Phase 2 trial that are not covered by JDRF's grant.

In October 2005, Sangamo entered into a Research License and Commercial Option Agreement with Dow AgroSciences LLC (DAS), a wholly owned indirect subsidiary of Dow Chemical Corporation. Under this agreement, Sangamo will provide DAS with access to the Company's proprietary ZFP technology and the exclusive right to use the Company's ZFP technology to modify the genomes or alter the nucleic acid or protein expression of plant cells, plants, or plant cell cultures. Sangamo will retain rights to use plants or plant-derived products to deliver ZFP TFs or ZFP nucleases (ZFNs) into human or animals for diagnostic, therapeutic, or prophylactic purposes.

The agreement with DAS provides for an initial three-year research term during which time the two parties will work together to validate and optimize the application of the Company's ZFP technology to plants, plant cells and plant cell cultures. A joint committee having equal representation from both companies will oversee this research. During the initial three-year research term, DAS will have the option to obtain a commercial license to sell products incorporating or derived from plant cells generated using the Company's ZFP technology, including agricultural crops, industrial products and plant-derived biopharmaceuticals. This commercial license will be exclusive for all such products other than animal and human health products. In the event that DAS exercises this option, DAS may elect to extend the research program beyond the initial three-year term on a year-to-year basis.

Pursuant to the Research License and Commercial Option Agreement, DAS made an initial cash payment to Sangamo of \$7.5 million. In November 2005, the Company sold approximately 1.0 million shares of common stock to DAS at a price of \$3.85 per share, resulting in proceeds of \$3.9 million. In addition, DAS will provide between \$4.0 and \$6.0 million in research funding over the initial three-year research term and may make up to an additional \$4.0 million in research milestone payments to Sangamo during this same period, depending on the success of the research program. In the event that DAS elects to extend the research program beyond the initial three-year term, DAS will provide additional research funding. If DAS exercises its option to obtain a commercial license, Sangamo will be entitled to full payment of the \$4.0 million in research milestones, a one-time exercise fee of \$6.0 million, minimum annual payments of up to \$25.25 million, development and commercialization milestone payments for each product,

and royalties on sales of products. Furthermore, DAS will have the right to sublicense Sangamo's ZFP technology to third parties for use in plant cells, plants, or plant cell cultures, and Sangamo will be entitled to twenty-five percent (25%) of any cash consideration received by DAS under such sublicenses. Revenues related to the research license under the DAS agreement is being recognized ratably over the initial three year research term of the agreement and were \$2.5 million and \$625,000 during 2006 and 2005, respectively. Revenues attributable to collaborative research and development performed under the DAS agreement were \$2.4 million and \$51,000 during 2006 and 2005, respectively. Revenues attributable to milestone payments were \$330,000 during 2006. Related costs and expenses incurred under the DAS agreement were \$568,000 and \$51,000 during 2006 and 2005, respectively.

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Sangamo has agreed to supply DAS and its sublicensees with ZFP TFs and/or ZFNs for both research and commercial use. If DAS exercises its option to obtain a commercial license, DAS may request that Sangamo transfer, at DAS's expense, the ZFP manufacturing technology to DAS or to a mutually agreed-upon contract manufacturer.

The Research License and Commercial Option Agreement will terminate automatically if DAS fails to exercise its option for a commercial license by the end of the initial three-year research term. DAS may also terminate the agreement at the end of the second year of the initial research term if the joint committee overseeing the research determines that disappointing research results have made it unlikely that DAS will exercise the option; Sangamo is guaranteed to receive \$4.0 million in research funding from DAS prior to such a termination. Following DAS's exercise of the option and payment of the exercise fee, DAS may terminate the agreement at any time. In addition, each party may terminate the agreement upon an uncured material breach of the other party. In the event of any termination of the agreement, all rights to use Sangamo's ZFP technology will revert to Sangamo, and DAS will no longer be permitted to practice Sangamo's ZFP technology or to develop or, except in limited circumstances, commercialize any products derived from Sangamo's ZFP technology.

In January 2005, Sangamo also announced an agreement with Amgen and in September 2005 a similar agreement with Novo Nordisk A/S. Sangamo is providing its ZFP technology to several companies including Amgen, Novartis and Novo Nordisk for evaluation of its use in developing enhanced cell lines for protein production.

In December 2004, Sangamo announced a research collaboration agreement with Pfizer Inc to use our ZFP technology to develop enhanced cell lines for protein pharmaceutical production. The scope of this agreement was expanded in January 2006 and provided further research funding from Pfizer to develop additional cell lines for enhanced protein production. Under the terms of the agreement, Pfizer is funding research at Sangamo and Sangamo will provide its proprietary ZFP technology for Pfizer to assess its feasibility for use in mammalian cell-based protein production. Sangamo is generating 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 2007, Sangamo received \$250,000 in research-related funding under its agreements with Pfizer. Revenues attributable to collaborative research and development performed under the Pfizer agreement were \$747,000 and \$790,000 during 2006 and 2005, respectively. Related costs and expenses incurred under the Pfizer agreements were \$342,000 and \$154,000 during 2006 and 2005, respectively. As of December 31, 2006 and 2005 accounts receivable from Pfizer represented 51% and 80%, respectively, of its total accounts receivable balance.

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, and again in September 2005, 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 2006, 2005 and 2004, revenues attributable to collaborative research and development performed under the LifeScan agreements were \$600,000, \$365,000 and \$85,000, respectively. Related costs and expenses associated with research and development performed under the LifeScan agreements were \$151,000 in 2006, \$69,000 in 2005 and \$5,000 in 2004.

**4. Property and Equipment**

Property and equipment consist of the following:

	<b>December 31,</b>	
	<b>2006</b>	<b>2005</b>
	<b>(In thousands)</b>	
Laboratory equipment	\$ 2,469	\$ 2,155
Furniture and fixtures	786	726
Leasehold improvements	1,658	1,658
	4,913	4,539
Less accumulated depreciation	(4,238)	(4,067)



**Table of Contents****5. 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 was \$1.6 million for 2006, 2005 and 2004. Future minimum payments under contractual obligations and commercial commitments at December 31, 2005 consist of the following (in thousands):

<b>Fiscal Year:</b>	<b>Operating Lease</b>	<b>License Agreements</b>
2007	\$ 444	\$ 213
2008	456	208
2009	467	228
2010	479	228
2011	491	
Thereafter	1,368	
Total minimum payments	\$ 3,705	\$ 877

**6. 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***

In November 2005, Sangamo completed a registered direct offering to institutional and strategic investors for a total of 5,080,000 shares of common stock at a price of \$3.85 per share to the investors, resulting in gross proceeds of approximately \$19.6 million. As part of the offering, Dow AgroSciences purchased 1,016,000 shares of common stock resulting in gross proceeds of approximately \$3.9 million. At December 31, 2005, the Company had no outstanding common stock subject to the company's contractual right of repurchase.

In June 2006, in an underwritten public offering and pursuant to an effective registration statement, Sangamo sold 3,100,000 shares of common stock at a public offering price of \$6.75 per share, resulting in net proceeds of approximately \$20.15 million after deducting underwriter's discount.

In December 2006, Sangamo issued 1,000,000 shares of common stock to Edwards as partial consideration for the purchase of Edwards' angiogenesis program. The issuance was exempt for the registration requirement pursuant to Section 4(2) of the Securities Act of 1933, as amended and, Rule 506 of Regulation D promulgated pursuant to such Act.

***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 3.0 percent of the total number of shares of our common stock outstanding on the last trading day of the preceding fiscal year.

**Table of Contents****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.

A summary of Sangamo's stock option activity follows:

	Options Outstanding		Weighted-Average Exercise Price per Share	Weighed Average Remaining Contractual Term
	Shares Available for Grant of Options	Number of Shares		
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	7.02
Additional shares authorized	758,132			
Options granted	(750,500)	750,500	\$ 4.12	
Options exercised		(138,239)	\$ 4.98	
Options canceled	264,260	(264,260)	\$ 7.90	
Balance at December 31, 2005	3,256,505	3,874,097	\$ 4.27	6.59
Additional shares authorized	917,127			
Options granted	(694,000)	694,000	\$ 6.73	
Options exercised		(274,896)	\$ 2.12	
Options canceled	235,389	(235,389)	\$ 7.36	
Balance at December 31, 2006	3,715,021	4,057,812	\$ 5.64	6.40
Options exercisable at December 31, 2006		2,507,915	\$ 5.81	4.95

There were no shares subject to Sangamo's right of repurchase as of December 31, 2006. The intrinsic value of options exercised during 2006, 2005, 2004 were \$1.2 million, \$512,000 and \$455,000, respectively.

The weighted-average fair value per share of options granted during 2006, 2005, and 2004 was \$5.36, \$3.39, and \$4.13, respectively, based upon the assumption in the Black-Scholes valuation model described in Note 2. The total fair value of shares vested and expected to vest during 2006, 2005 and 2004 was \$6.9, \$2.8 and \$6.0 millions,

respectively.

The weighted-average estimated fair value per share of employee purchase rights during 2006, 2005, and 2004 were \$2.22, \$1.61, and \$1.65, respectively, based upon the assumptions in the Black-Scholes valuation model described in Note 2.



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The following table summarizes information with respect to stock options outstanding at December 31, 2006:

<b>Range of Exercise Price</b>	<b>Options Outstanding</b>	
	<b>Number of Shares</b>	<b>Weighted Average Remaining Contractual Life (In Years)</b>
\$0.05 - \$0.17	461,583	1.32
\$0.23 - \$3.61	427,107	6.75
\$3.78 - \$4.11	669,996	8.07
\$4.15 - \$5.18	232,887	7.47
\$5.19 - \$5.19	476,071	7.29
\$5.30 - \$6.77	258,968	7.48
\$6.82 - \$6.82	475,000	9.95
\$6.94 - \$7.13	21,500	4.65
\$7.49 - \$7.49	415,000	4.74
\$7.56 - \$38.00	619,700	5.04
	4,057,812	6.40

At December 31, 2006, the aggregate intrinsic values of the outstanding and exercisable options were \$7.4 million and \$5.3 million, respectively.

**Common Stock**

At December 31, 2006, the Company has reserved shares of common stock for future issuance as follows:

2004 Stock Option Plan	7,772,833
2000 Employee Stock Purchase Plan	1,367,117
	9,139,950

**7. Comprehensive Loss**

Activities in comprehensive loss were as follows (in thousands):

	<b>Year Ended December 31,</b>		
	<b>2006</b>	<b>2005</b>	<b>2004</b>
Net loss	\$ (17,864)	\$ (13,293)	\$ (13,818)
Increase /(decrease) in unrealized gains on marketable securities	54	29	(93)
Other than temporary loss on investments recognized in other income/(expense)		21	71
Comprehensive loss	\$ (17,810)	\$ (13,301)	\$ (13,840)

Accumulated other comprehensive income at December 31, 2006 and 2005 is \$114,000 and \$60,000. It relates to unrealized gains on marketable securities.

**8. Income Taxes**

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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:

	<b>December 31,</b>	
	<b>2006</b>	<b>2005</b>
Deferred tax assets:		
Net operating loss carryforwards	\$ 30,150	\$ 23,003
Research and development tax credit carryforwards	3,911	3,171
Capitalized research	1,425	1,425
Other	628	601
	36,114	28,200
Valuation allowance	(36,114)	(28,200)
Net deferred tax assets	\$	\$

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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 Sangamo has incurred losses. The valuation allowance increased by \$7.9 million and \$4.1 million for the years ended December 31, 2006 and 2005, respectively. As of December 31, 2006, Sangamo had net operating loss carryforwards for federal income tax purposes of approximately \$79.7 million, which expire in the years 2007 through 2026. The Company also has state net operating loss carryforwards of approximately \$50.9 million, which expire in the years 2007 through 2016. The Company also has federal and state research tax credit carryforwards of \$2.6 million and \$1.9 million, respectively. The federal research credits will begin to expire in the year 2018 through 2026 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.

**9. Accounts Payable and Accrued Liabilities**

Accounts payable and accrued liabilities consist of the following:

	<b>December 31,</b>	
	<b>2006</b>	<b>2005</b>
Accounts payable	\$ 1,108	\$ 766
Accrued professional fees	289	548
Accrued research and collaboration expense	114	198
Deferred Rent	100	64
Other	115	22
Total accounts payable and accrued liabilities	\$ 1,726	\$ 1,598

**10. Quarterly Financial Data (Unaudited)**

The following table sets forth certain unaudited quarterly financial data for the eight quarters ended December 31, 2006. 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.

	<b>Fiscal Year 2006</b>				<b>Fiscal Year 2005</b>			
	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
Revenues(3)	\$ 2,136	\$ 1,777	\$ 1,779	\$ 2,193	\$ 311	\$ 466	\$ 440	\$ 1,267(2)
Expenses	\$ 5,344	\$ 5,849	\$ 5,422	\$ 11,999(1)	\$ 3,836	\$ 3,874	\$ 4,204	\$ 4,317
Net loss	\$(2,744)	\$(3,327)	\$(2,845)	\$ (8,948)	\$(3,498)	\$(3,332)	\$(3,639)	\$(2,824)
Net loss per share	\$ (0.09)	\$ (0.11)	\$ (0.08)	\$ (0.26)	\$ (0.14)	\$ (0.13)	\$ (0.14)	\$ (0.10)

(1) Q4 2006 expenses include approximately \$5.8 million research and development expense in connection with acquisition of

the Edwards  
ZFP  
Therapeutic  
angiogenesis  
programs.

- (2) Q4 2005  
revenues  
include  
approximately  
\$677,000 in  
connection with  
our Research  
License and  
Commercial  
Option  
Agreement with  
DAS and  
increased  
revenue of  
\$352,000 in  
connection with  
our Advanced  
Technology  
Program grant  
awarded by the  
National  
Institute of  
Standards and  
Technology.
- (3) During the  
fourth quarter of  
2005, the  
Company  
concluded that  
revenues since  
inception related  
to the Advanced  
Technology  
Program had  
been  
understated by  
\$254,000,  
resulting in a  
one-time  
adjustment  
recorded to  
revenue. This  
table reflects the  
effect of that

adjustment on  
previously  
reported 2005  
quarters.

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

None.

**Item 9A. Controls and Procedures**

**EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES**

We have performed an evaluation under the supervision and with the participation of our management, including our principal executive officer and principal financial officer of the effectiveness of our disclosure controls and procedures, as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act). Based on that evaluation, our management, including our principal executive officer and principal financial officer, concluded that our disclosure controls and procedures were effective as of December 31, 2006 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, and is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding disclosure.

There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including cost limitations, the possibility of human error, judgments and assumptions regarding the likelihood of future events, and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives.

**MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act.

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, 2006. Ernst & Young LLP, our independent registered public accounting firm, has audited the consolidated financial statements included in our Annual Report and has issued an attestation report on management's assessment of our internal control over financial reporting as well as on the effectiveness of the Company's internal control over financial reporting.

**CHANGES IN INTERNAL CONTROLS**

There has been no change in our internal controls over financial reporting during the fourth fiscal quarter of 2006 that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

**Item 9B. Other Information**

Not applicable.

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**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 2007 Proxy Statement ), no later than April 29, 2007, and certain information to be included in the Proxy Statement is incorporated herein by reference.

**Item 10. *Directors, Executive Officers and Corporate Governance***

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 2007 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 2007 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 2007 Proxy Statement.

**Item 13. *Certain Relationships and Related Transactions and Director Independence***

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 2007 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 2007 Proxy Statement.

**PART IV**

**Item 15. *Exhibits and Financial Statement Schedules***

(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.

(b) See the Index of Exhibits

(c) See the Financial Statements beginning on page 46 of this Form 10-K

**Table of Contents****SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 1, 2007.

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:

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ EDWARD O. LANPHIER II  Edward O. Lanphier II	President, Chief Executive Officer and Director (Principal Executive Officer)	March 1, 2007
/s/ GREG S. ZANTE  Greg S. Zante	Vice President, Finance and Administration (Principal Financial and Accounting Officer)	March 1, 2007
/s/ WILLIAM G. GERBER, M.D.  William G. Gerber, M.D.	Director	March 1, 2007
/s/ JOHN W. LARSON  John W. Larson	Director	March 1, 2007
/s/ MARGARET A. LIU, M.D.  Margaret A. Liu, M.D.	Director	March 1, 2007
/s/ STEVEN J. MENTO, Ph.D  Steven J. Mento, Ph.D	Director	March 1, 2007
/s/ H. WARD WOLFF  H. Ward Wolff	Director	March 1, 2007
/s/ MICHAEL C. WOOD  Michael C. Wood	Director	March 1, 2007



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**Index to Exhibits**

<b>Exhibit Number</b>	<b>Description of Document</b>
1.1	Purchase Agreement, dated June 15, 2006, between Sangamo and Piper Jaffray & Co. (incorporated by reference to Exhibit 1.1 to the Company's Form 8-K filed in June 16, 2006)
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	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).
10.6	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).
10.7	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).
10.8(+)	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).
10.9	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).

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- 10.10(+) 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).
- 10.11(+) 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).
- 10.12(+) 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).
- 10.13(+) 2004 Stock Incentive Plan (incorporated by reference to Appendix C of the Company's Definitive Proxy Statement on Schedule 14A filed April 29, 2004).
- 10.14 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).
- 10.15 First Amendment to Triple Net Laboratory Lease, between Sangamo and Point Richmond R&D Associates II, LLC, dated March 12, 2004 (incorporated by reference to Sangamo's Annual Report on Form 10-K for the year ended December 31, 2004).
- 10.16(+) Separation Agreement and Release between Sangamo and Dr. Casey Case, dated November 18, 2005 (incorporated by reference to Exhibit 99.1 to the Company's Form 8-K filed November 22, 2005).

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<b>Exhibit Number</b>	<b>Description of Document</b>
10.17	Placement Agency Agreement, dated November 10, 2005, among Sangamo, JMP Securities LLC, Piper Jaffray & Co. and Leerink Swann & Company (incorporated by reference to Exhibit 1.1 to the Company's Form 8-K filed on November 14, 2005).
10.18	Research and Commercial Option License Agreement, dated October 5, 2005, between Sangamo and Dow AgroSciences LLC (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K, filed March 16, 2006).
10.19	Research, Development and Commercialization Agreement dated October 24, 2006 between Sangamo and Juvenile Diabetes Research Foundation International.
10.20	Asset Purchase Agreement dated December 1, 2006 by and between Sangamo and Edwards Lifesciences LLC (incorporated by reference to the Company's Form 8-K filed on December 28, 2006)
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.

Confidential treatment has been requested for certain information contained in this document. Such information has been omitted and filed separately with the Securities and Exchange Commission.

- (+) Indicates management contract or compensatory plan or arrangement.