

**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, 2005

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)

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

(Address of principal executive offices)

**68-0359556**

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

**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

**None**

Securities registered pursuant to Section 12(g) of the Act: Common Stock, \$0.01 par value per share

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

As of June 30, 2005, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$58,453,331 based on the closing sale price as reported on the National Association of Securities Dealers Automated Quotation System National Market System.

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

<u>Class</u>	<u>Outstanding at February 14, 2006</u>
Common Stock, \$0.01 par value per share	30,672,183 shares

**DOCUMENTS INCORPORATED BY REFERENCE**

<u>Document</u>	<u>Parts Into Which Incorporated</u>
Proxy Statement for the 2006 Annual Meeting of Stockholders	Part III

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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," "should" and "will." Actual results may differ materially from those expressed or implied in those statements. Factors that could cause these differences include, but are not limited to, those discussed under "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, facilitating either ZFN-mediated correction of genes that contain disease-causing mutations, or disruption of genes that facilitate or are responsible for disease pathology.

The pharmaceutical industry has invested billions of dollars to discover and validate new drug targets over the last decade. While there have been several notable successes, in many 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 generated gene targets 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 new class of drugs. In November 2005, we completed the enrollment and treatment of the first Phase 1 clinical trial of a ZFP Therapeutic (SB-509) in patients with diabetic neuropathy and we plan to initiate a Phase 2 trial of SB-509 in 2006. In addition, one of our corporate partners, Edwards Lifesciences (Edwards), has initiated two Phase 1 clinical studies to evaluate the safety and preliminary efficacy of a proprietary Sangamo ZFP Therapeutic, EW-A-401, for the treatment of peripheral artery disease (PAD). Sangamo has also initiated preclinical animal studies of ZFP Therapeutics in congestive heart failure, nerve regeneration, age-related macular degeneration and neuropathic pain. In addition, we have research-stage programs in HIV, X-linked severe combined immunodeficiency (X-linked SCID), hemophilia and hemoglobinopathies, cancer and cancer immunotherapy.

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 range from human therapeutics and drug discovery to 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 or nucleases into human or animals for diagnostic, therapeutic, or prophylactic purposes. 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, Sangamo is supplying its pharmaceutical partners Medarex Inc. and, recently, Pfizer Inc, Novo Nordisk, Novartis and Amgen with ZFP engineered cells for the enhanced production of therapeutic proteins, an advance that could substantially increase the efficiency of pharmaceutical protein production. Sangamo has 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 107 patents issued in the United States and foreign national jurisdictions, and we have 178 patent applications pending worldwide. We continue to license and file new patent applications that

strengthen our core and accessory patent portfolio. We believe that our proprietary position will protect our ability to research, develop, and commercialize products and services based on ZFP technology across our chosen applications.

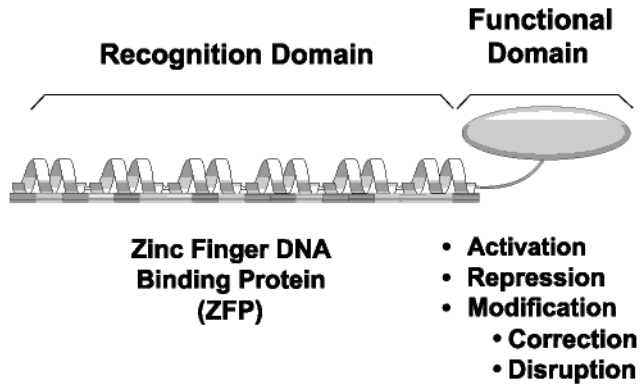
Over the last four years, we have increasingly focused our company on ZFP Therapeutic product development and have recruited experienced scientists and managers with substantial product development experience. We are also building our capabilities in preclinical development, regulatory affairs and clinical 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 that gene to be activated or repressed. In higher organisms, transcription factors typically comprise two principal domains: the first is a DNA-binding domain, which recognizes a target DNA sequence and thereby directs the transcription factor to the proper chromosomal location; the second is a functional domain that causes the target gene to be activated or repressed (see Figure A). The two-component structure of our engineered ZFP TFs is modeled on this naturally occurring structure of transcription factors in all higher organisms.



**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 several thousand 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 Correction and Gene Disruption**

The ZFP DNA-binding domain may also be coupled to the cleavage domain of a restriction endonuclease — an enzyme that cuts DNA — creating a zinc finger nuclease or ZFN. Using the DNA binding domain of an

engineered ZFP to target the nuclease to a chosen location, we can design a ZFN to generate a physical break at a defined location of a target gene. This targeted break in the DNA can be manipulated to effect two different outcomes, either to facilitate the replacement of the disease-causing mutation with a "normal" or "corrected" DNA sequence or to disrupt the disease-related gene resulting in the expression of a truncated or non-functional protein. We believe that ZFN-mediated gene correction will allow the corrected gene to be expressed in its natural chromosomal context and may provide a novel approach for the precise repair of DNA sequence mutations responsible for monogenic diseases such as X-linked severe combined immunodeficiency (X-linked SCID) and sickle cell anemia. Similarly, ZFN-mediated gene modification may permit the targeted disruption of a gene that is involved in disease pathology such as disruption of the CCR5 gene to treat HIV infection.

#### **ZFP Therapeutic Gene Correction of Monogenic Disease**

Genetic diseases such as X-linked SCID, sickle cell anemia, 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. Our engineered ZFPs can be attached to nuclease domains to create ZFNs. The ZFN is able to "recognize" its intended gene target through its engineered (ZFP) DNA-binding domain (Figure A). However, instead of regulating the expression of the target gene (as with a ZFP TF), the ZFN causes the gene to be cut near the ZFP binding site, triggering a repair process and facilitating the correction of the DNA sequence at the site of the mutation. A segment of DNA or "donor sequence" that encodes the correct gene sequence is also introduced into the cell to provide a template for the correction of the cellular gene.

The process Sangamo uses for gene correction takes advantage of a natural process which is called homologous recombination (HR). While gene correction has been pursued in academic research laboratories for over a decade, its clinical application has been limited by the low efficiency of HR, the biological process of gene repair. HR occurs naturally at a rate of approximately once in every one million cells receiving the DNA donor sequence; this rate is too low to be of clinical use. However, 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 ZFN's 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 integration of any foreign DNA sequence, 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 insertion of a DNA sequence into a specific site in a genome, which may also be applied to gene correction.

#### **ZFP Therapeutic Gene Disruption for Infectious Diseases**

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

#### **A New Class of Human Therapeutics**

With our ability to deliver gene-specific ZFP TFs and ZFNs for the activation, repression, correction, insertion or disruption 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 which, although they have a clear role in disease processes, cannot be bound or modulated for therapeutic purposes by small molecules with drug-like properties. Alternative therapeutic approaches may be required to modulate the biological activity of these so-called “non-druggable” targets. This may create a significant clinical and commercial opportunity for the therapeutic regulation or modification of disease-associated genes using engineered ZFP TFs or ZFNs.

ZFP Therapeutics provide a new approach to non-druggable targets. ZFP TFs act through a mechanism that is unique among biological drugs: direct regulation of the “disease” gene as opposed to the 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 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 which 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 small-molecule drugs, protein pharmaceuticals, and conventional gene therapy:

- ZFP Therapeutics act at the DNA level to regulate or modify gene expression, allowing direct modulation of the gene;
- ZFP Therapeutics circumvent the “non-druggable” properties of many drug targets;
- ZFP TFs can either activate or repress therapeutic gene targets;
- ZFP TFs can activate or repress the expression of all variant proteins (isoforms) encoded by a particular gene;
- ZFP TFs may themselves be expressed either transiently, for acute indications, or longer term, for chronic conditions;
- ZFNs can be used to correct genes responsible for monogenic diseases or disrupt genes involved in disease processes; and
- Permanent gene correction, insertion or disruption 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 in a way that causes the desired effect at the levels of target cell, tissue, and organism. We have extended these results to preclinical animal models of disease, including mice, rats, rabbits, and pigs. We have published 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 Sangamo’s 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. We expect to present data from this Phase 1 trial in the first half of 2006 and we plan to initiate a Phase 2 trial in DN in the second half of 2006. Our partner, Edwards Lifesciences has two Phase 1 trials of a ZFP Therapeutic in progress. The first, in the intermittent



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claudication (IC) stage of PAD 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), at Duke University Medical Center. Edwards has stated that they will begin a Phase 2 trial in CLI in 2006. We are developing the additional preclinical data to support the development of ZFP Therapeutics for cardiovascular disease, infectious diseases including HIV infection, neuropathic pain, nerve regeneration, cancer, and monogenic diseases including X-linked SCID and hemophilia and hemoglobinopathies such as sickle cell anemia and  $\beta$ -thalassemia.

**Product Development Programs**

In addition to our Phase 1 clinical trial in DN and Edwards' two Phase 1 clinical trials in PAD, we currently have seven 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).

Clinical Indication	Development Stage	Therapeutic Approach	Comments
Diabetic neuropathy (DN)	Phase 1 clinical trial enrollment completed November 2005	ZFP TF (SB-509) up-regulation of VEGF-A to protect and induce growth of neuronal and glial cells	Evidence from animal models suggests that up-regulation of endogenous VEGF-A directly induces the growth and repair of neuronal and glial cells. Trial is designed to evaluate product safety and preliminary trends in efficacy. Data will be presented in 2006. We expect to initiate Phase 2 trial in the second half of 2006.
Peripheral artery disease (PAD) Intermittent claudication	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	Sponsored by our partner, Edwards Lifesciences; evaluating product safety and preliminary evidence of increase in blood flow in lower extremities of patients with intermittent claudication.
Peripheral artery disease (PAD) Critical limb ischemia	Phase 1 trial ongoing at Duke University Medical School	ZFP TF (EW-A-401) up-regulation of VEGF-A to induce angiogenesis, or blood vessel formation, in the lower extremities	Sponsored by our partner, Edwards Lifesciences; primarily evaluating product safety but also changes in progenitor cell populations to determine the extent to which tissue repair can be accomplished. Edwards expects to initiate a Phase 2 trial in 2006.
Ischemic heart disease (IHD)	Preclinical (animal efficacy)	ZFP TF up-regulation of VEGF-A to induce angiogenesis in the ischemic heart	Sponsored by our partner, Edwards Lifesciences; currently evaluating the preclinical efficacy of up-regulation of VEGF-A in animal models.
Human immunodeficiency virus (HIV) infection and Acquired immune deficiency syndrome (AIDS)	Preclinical (cell-based studies)	ZFN-mediated disruption of CCR5 gene in circulating T- cells, mononuclear cells and stem cells from patients infected with HIV	A well-documented mutation in CCR5 (CCR5 $\Delta$ 32) exists in humans and confers resistance to HIV infection. Sangamo scientists currently optimizing use of ZFN gene disruption to recapitulate the effects of this mutation in immune cells.

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Clinical Indication	Development Stage	Therapeutic Approach	Comments
Congestive heart failure (CHF)	Preclinical (animal efficacy)	ZFP TF down- regulation of phospholamban (PLN) to increase the contractility of heart muscle	Evidence from cellular and transgenic animal models suggests that phospholamban plays a critical role in congestive heart failure. Sangamo scientists currently evaluating the preclinical efficacy of PLN repression to increase the contractility of heart muscle in a rat model of congestive heart failure.
Neuropathic pain (initial indication: severe cancer- related pain)	Preclinical (animal efficacy)	ZFP TF down- regulation of cell surface receptors involved in pain signaling	Several pain targets have been identified and validated. Sangamo scientists are currently evaluating various formulations of ZFP TFs for the down-regulation of cell surface receptor (TrkA), and ion-channel (PN3) to choose the optimal ZFP TF and target receptor.
Nerve regeneration (nerve crush and spinal cord injury, amyotrophic lateral sclerosis (ALS))	Preclinical (animal efficacy)	ZFP TF up-regulation of VEGF-A to induce nerve regeneration	Sangamo scientists and collaborators are evaluating delivery methods and dosing of ZFP TF in models of nerve crush and spinal cord injury.
Age-related macular degeneration (AMD)	Preclinical (animal efficacy)	ZFP TF antiangiogenic approach; ZFP TF mediated up-regulation of PEDF and down regulation of VEGF-A in the eye	Sangamo scientists are evaluating a single and a combination of ZFP TFs to inhibit angiogenesis in the eye.
Cancer	Preclinical (cell-based studies)	ZFP TF mediated up-regulation of PEDF and GM-CSF	GM-CSF is a powerful stimulator of the immune system and PEDF is a potent antiangiogenic factor. Sangamo scientists are evaluating the combination of ZFP TFs as a means to stimulate a cell-mediated, antitumor response and reduce the vascularization of the tumor mass.

Table 1. Clinical indications currently targeted by 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. This may be gradually replaced by loss of sensation and motor function as nerve damage progresses. Ulcers and sores may appear on numb areas of the foot or leg because pressure or injury goes unnoticed. Despite adequate treatment, these areas of trauma frequently become infected and this infection may spread to the bone, necessitating amputation of the leg or foot. More than 60% of non-traumatic lower-limb amputations in the United States occur among people with diabetes. In the period from 2000 to 2001 this translated to approximately 82,000 amputations. The American Diabetes Association estimates that there are approximately 18.3 million people with diabetes in the United States and that of those about 60% to 70% have mild to severe forms of neuropathy. According to the Centers for Disease Control (CDC), diabetes is becoming more common in the United States. From 1980 through 2002, the number of Americans with diabetes more than doubled.

Apart from rigorous control of blood glucose, the only therapies approved by the FDA for the treatment of diabetic neuropathy are analgesics and antidepressants that address only the symptoms and do not retard or reverse the progression of the disease. VEGF-A has been demonstrated to have direct neuroproliferative, neuroregenerative and neuroprotective properties. Administration of recombinant VEGF-A or the cDNA encoding VEGF-A has been observed to retard or partially reverse the condition in preclinical animal models of diabetic neuropathy. We have completed preclinical studies of VEGF-A activation in similar preclinical models to confirm and extend these findings by using our ZFP Therapeutic SB-509, which is designed to up-regulate the endogenous VEGF-A gene. In January 2005, Sangamo 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 1, single blind, dose-escalation trial to measure the laboratory and clinical safety of SB-509. We expect to present data from this trial in the first half of 2006 and to initiate a Phase 2 clinical trial of SB-509 in the second half of 2006.

***Peripheral Artery Disease (PAD)***

PAD is the result of inadequate arterial blood flow to the lower extremities. It is seen as a spectrum of disease, beginning with asymptomatic reduction in blood flow to the leg; followed by the development of intermittent claudication, which limits walking distance; followed by foot pain in the absence of exercise, so-called resting pain; finally leading to tissue damage and severely impaired mobility a stage known as critical limb ischemia. The condition affects 8-12 million people in the United States. Eighty percent of these patients have intermittent claudication and do not progress to resting pain or critical limb ischemia. This program to develop a formulation of a ZFP TF, EW-A-401, an activator of VEGF-A for therapeutic angiogenesis is funded and managed by our partner, Edwards Lifesciences. Edwards filed an IND application in February 2004 and initiated a Phase 1 clinical trial at the National Heart Lung and Blood Institute (NHLBI) at the National Institutes of Health (NIH) in August, 2004 for EW-A-401 to treat intermittent claudication. In June 2005, Edwards announced that they had also initiated a Phase 1 human clinical trial for EW-A-401 for critical limb ischemia, the more severe form of PAD, at Duke University Medical Center.

***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 ischemic heart disease. The IHD program is funded and managed by our partner, Edwards Lifesciences, who have stated that they expect to complete preclinical animal efficacy studies in 2005 and, based upon those data, expect to initiate a human clinical trial to evaluate safety of a ZFP TF activator of VEGF-A in post-myocardial IHD.

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

According to worldaidsday.org, in 2005, over 3.0 million people were infected with HIV, and there are now over 40.0 million people world-wide living with HIV and AIDS. An estimated 3.0 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, 44,000 new infections and 16,000 deaths in 2004.

HIV infection results in the death of immune system cells and thus leads to AIDS, a condition in which the body's immune system is depleted to such a degree that the patient is unable to fight off common infections. Ultimately, these patients succumb to opportunistic infections or cancers. CCR5 is the co-receptor for HIV entry into T-cells and, if CCR5 is not expressed on their surface, HIV cannot infect these cells. A population of individuals that is immune to HIV infection, despite multiple exposures to the virus, has been identified and extensively studied. They have a natural mutation, 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 on the growth or survival of these individuals. We are using our ZFN-mediated gene disruption technology to disrupt the CCR5 gene in cells of a patient's immune system to make these cells permanently resistant to HIV infection. The aim is to provide a

population of HIV-resistant cells that can fight 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.

#### ***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.

#### ***Neuropathic Pain (Cancer Pain)***

Neuropathic pain comprises a set of chronic pain disorders that cannot be connected to a physical trauma, as is the case with acute pain. There are several million patients with neuropathic pain in the United States including late-stage cancer patients. Studies have shown that 90% of patients with advanced cancer experience severe pain, and that pain occurs in 30% of all cancer patients regardless of the stage of the disease. Pain usually increases as cancer progresses. The most common cancer pain is from tumors that metastasize to the bone. As many as 60-80% of cancer patients with bone metastasis experience severe pain. The second most common cancer pain is caused by tumors infiltrating nerves. Tumors near neural structures may cause the most severe pain. The few drugs currently being used to treat pain in these patients show marginal efficacy and can have very significant side effects. Chronic pain is a major and underserved market opportunity and is now an area of intense focus by pharmaceutical researchers owing to the discovery of several new pain-related pathways and drug targets. Recent studies have shown that in chronic pain, certain proteins in nerve cell membranes are up-regulated or over-expressed. Our scientists have identified ZFP TF product candidates that repress the expression of two of these pain targets in cell-based models. We are incorporating these ZFP TFs into gene transfer vectors for continued testing in pain models during 2006.

#### ***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 and disease.

#### ***Age-related Macular Degeneration (AMD)***

AMD is the leading cause of blindness in the United States. The "wet" form of the disease is responsible for most (90%) of the severe loss of vision and is caused by growth of abnormal blood vessels under the central part of the retina or macula. These new blood vessels may then bleed and leak fluid, causing the macula to bulge or lift up, thus distorting or destroying central vision. The Macular Degeneration Foundation estimates that there are approximately 200,000 new cases of wet macular degeneration in the United States each year. Each year 1.2 million of the estimated 12 million people in the US with macular degeneration will suffer severe central vision loss. Each

year 200,000 individuals will lose all central vision in one or both eyes. Sangamo scientists are developing ZFP TFs to inhibit blood vessel growth, or angiogenesis, within the eye. They have identified ZFP TFs that can activate the expression of the gene for Pigment Epithelium Derived Factor (PEDF), a factor known to inhibit the growth of blood vessels and ZFP TFs that can inhibit the expression of VEGF-A, a potent angiogenic factor. These ZFP TFs are being tested individually and in combination in preclinical animal models of AMD.

#### ***Cancer***

The American Cancer Society estimates that the incidence of new cancer cases was approximately 1.3 million in 2004, with 565,500 cancer deaths, accounting for 1 of every 4 deaths in the United States. An increasing number of genes are being identified that appear to be important to the development and spread of many forms of cancer. We believe our ZFP technology has potential applications in cancer therapy, both in regulating endogenous genes and in activating the body's natural mechanisms for fighting disease. Sangamo scientists are engineering 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.

#### **ZFP Therapeutic Research Programs**

Sangamo has several research stage programs in progress in gene modification. These initiatives include programs in the hemoglobinopathies (e.g. sickle cell anemia and  $\beta$ -thalassemia) and in immune system disorders such as X-linked severe combined immunodeficiency (X-linked SCID) and hemophilia.

#### **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. Appointments in these areas included the hiring, in August 2004, of Dale Ando, M.D. as Vice President, Therapeutic Development and Chief Medical Officer. Dr. Ando has held senior positions in therapeutic product development in several biotechnology companies and has served on the National Institutes of Health (NIH) Recombinant DNA Advisory Committee (NIH RAC) and the Adenoviral Safety Committee. 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. This will serve to minimize our investment in fixed capital while maximizing our flexibility in the selection of gene transfer systems for the delivery of ZFP TF and ZFN genes. 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. In December 2004, we hired David Ichikawa as Senior Vice President, Business Development. Mr. Ichikawa has more than 20 years of industry experience with both pharmaceutical and biotechnology companies in various commercial areas.

We believe the advancement of our first ZFP Therapeutics into clinical trials in 2004 and 2005 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 AFP Therapeutics into Phase 1 clinical trials may bring attention to our other AFP 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.

#### **Strategic Partnership with Edwards Lifesciences Corporation**

In January 2000, we announced a therapeutic product development collaboration with Edwards Lifesciences Corporation. Under the agreement, we have licensed to Edwards, on a worldwide, exclusive basis, ZFP Therapeutics for use in the activation of VEGFs and VEGF receptors in ischemic cardiovascular and vascular disease. Edwards purchased a \$5.0 million note that converted, together with accrued interest, into 333,333 shares of common stock at the time of our initial public offering (IPO) at the IPO price. In March 2000, Edwards purchased a \$7.5 million convertible note in exchange for a right of first refusal for three years to negotiate a license for additional ZFP Therapeutics in cardiovascular and peripheral vascular diseases. That right of first refusal was not exercised and terminated in March 2003. Together with accrued interest, this note converted into common stock at the time of our IPO at the IPO price. Through 2001, we received \$2.0 million in research funding from Edwards and a \$1.4 million milestone payment for delivery of a lead ZFP Therapeutic product candidate. In November 2002, Edwards signed an amendment to the original agreement and agreed to provide up to \$3.5 million in research and development funding, including \$2.95 million for research and development activities performed in 2002 and 2003. The filing of the IND for PAD in 2004, and the achievement of other research-related milestones in 2003, triggered a total of \$1.0 million in milestone payments from Edwards Lifesciences in the first quarter of 2004.

There were no revenues attributable to milestone achievement and collaborative research and development performed under the Edwards agreement during 2005. Revenues were \$615,000 and \$1.5 million for 2004 and 2003, respectively. There were no related costs and expenses incurred for services performed under the Edwards agreement for either 2005 or 2004. Costs and expenses under the agreement were \$1.4 million for 2003. We have no future commitments related to these agreements. Revenues attributable to milestone achievement and collaborative research and development performed under the Edwards agreement were 0%, 47% and 59% for 2005, 2004 and 2003, respectively, of total revenues earned by Sangamo. As of December 31, 2005 and 2004, there were no amounts owed the Company under the Edwards agreements.

Our license agreement with Edwards Lifesciences provides Edwards with worldwide, exclusive rights for ZFP Therapeutics “for the activation of VEGF and VEGF receptors for the treatment and prevention of ischemic cardiovascular and vascular disease in humans.” We have retained all rights to use our technology for all therapeutic applications of VEGF activation outside of the treatment and prevention of ischemic cardiovascular and vascular disease in humans. During the first quarter of 2005, Sangamo commenced a Phase I clinical trial for the treatment of diabetic neuropathy using a ZFP Therapeutic for the activation of VEGF. Edwards has stated that its rights include diabetic neuropathy and consequently our activities relating to diabetic neuropathy constitute a breach of the agreement. We strongly disagree with the Edwards’ assertion because diabetic neuropathy is a neurological disease and not an ischemic vascular disease and therefore is outside the scope of the Edwards license. Sangamo and Edwards are in discussions regarding this issue.

In the future, Sangamo may receive milestone payments and royalties under this agreement. We have received \$2.5 million in milestone payments to date and we could receive \$27.0 million in additional milestone payments under the agreement if all future milestones are met for the first product developed under the agreement. Any subsequent products developed under the agreement may generate up to \$15.0 million in milestone payments each. We would also receive royalties on any sales of products generated under the agreement and these royalty obligations would continue until the expiration of the last-to-expire patent covering products developed under the agreement on a country-by-country basis. Based on currently issued patents, these royalty obligations would last through January 12, 2019. The development of any products is subject to numerous risks and no assurance can be given that any products will successfully be developed under this agreement. See “Risk Factors — Our gene regulation technology is relatively new, and if we are unable to use this technology in all our intended applications, it would limit our revenue opportunities.”

Under the Sangamo-Edwards agreement, we were responsible for advancing product candidates into preclinical animal testing. Edwards has responsibility for preclinical development, regulatory affairs, clinical development, and the sales and marketing of ZFP Therapeutic products developed under the agreement. Sangamo may

receive milestone payments in connection with the development and commercialization of the first product under this agreement and may also receive royalties on product sales. As part of the November 2002 amendment to our original agreement, Edwards Lifesciences also entered into a joint collaboration with us to evaluate ZFP TFs for the regulation of a second therapeutic gene target, phospholamban (PLN), for the treatment of congestive heart failure. Under the amended agreement, Sangamo granted Edwards a right of first refusal to Sangamo's ZFP TFs for the regulation of PLN. This right of first refusal terminated on June 30, 2004. On August 14, 2003 Edwards and Sangamo entered into a third amendment to the original license agreement. Under this amendment, Sangamo received payment for research and development milestones associated with the VEGF and PLN programs.

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

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

#### **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 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 2003 the world wide sales of protein pharmaceuticals totaled over \$32 billion. Industry experts believe that antibody drugs may generate sales in excess of \$6 billion in 2005, and it is thought that if 10% of the antibody drugs currently in clinical trials prove successful, total sales could reach \$45 billion by 2009 (source: Scrip Reports: PJB Publications, 2004).

Sangamo scientists have demonstrated that ZFP-engineered mammalian cells may be used to increase the yield of systems used for pharmaceutical protein production.

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 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 quarter of 2006 and first quarter of 2005, we received \$775,000 and \$500,000 in research-related funding under our agreements with Pfizer. Revenues attributable to collaborative research and development performed under the Pfizer agreement were \$790,000 and \$42,000 during 2005 and 2004,

respectively. Related costs and expenses incurred under the Pfizer agreements were \$154,000 during 2005. There were no costs or expenses incurred under the Pfizer agreement during 2004. As of December 31, 2005 and 2004 accounts receivable from Pfizer represented 80% and 88%, respectively, of our total accounts receivable balance.

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.

#### **Plant Agriculture Agreements**

Sangamo scientists and collaborators have shown that ZFP TFs and ZFNs can be used to regulate and modify genes in plants with similar efficacy to that shown in various mammalian cells and organisms. 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 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.

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. 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 us of \$7.5 million and agreed to purchase up to \$4.0 million of our common stock in the next financing transaction meeting certain criteria. 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. 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 \$625,000 during 2005. Revenues attributable to collaborative research and development performed under the DAS agreement were \$51,000 during 2005. Related costs and expenses incurred under the DAS agreement were \$51,000 during 2005.

#### 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 and 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 11 families of patent filings. All of these patent families have been filed in the United States, and seven have been filed internationally in selected countries. As of January 1, 2006, these patent filings have resulted in 15 issued U.S. patents and 10 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 December 31, 2005, we had 55 families of Sangamo-owned patent filings, including 23 issued U.S. patents, 53 granted foreign patents, 70 pending U.S. patent applications and 75 pending foreign patent applications. These patent filings are directed to improvements in the design, composition, and use of ZFPs, ZFP TFs, and ZFNs. In the aggregate, we believe that our licensed patents and patent applications, as well as the issued Sangamo patents and pending Sangamo patent applications, will provide us with a substantial proprietary position in our commercial development of ZFP technology. The following tables provide information regarding our U.S. patents and the U.S. patents we have licensed:

#### Sangamo-Owned US Patents

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

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

**Licensed US Patents**

Patent No.	Subject	Issue Date	Expiration Date
5,356,802	"Functional domains in <i>Flavobacterium okeanokoites</i> ( <i>FokI</i> ) restriction endonuclease"	October 18, 1994	October 18, 2011
5,436,150	"Functional domains in <i>Flavobacterium okeanokoites</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

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Patent No.	Subject	Issue Date	Expiration Date
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

**Technology Licenses**

**Massachusetts Institute of Technology**

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

**The Johns Hopkins University**

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

**Johnson & Johnson**

The Company entered into a license agreement with Johnson & Johnson (J&J) on May 9, 1996 whereby the Company was granted a worldwide exclusive license to technology and patents for the research, development and commercialization of therapeutic and diagnostic products using engineered ZFPs. Pursuant to the agreement, the Company paid a license fee and will make future milestone payments and pay royalties on any product sales during the term of the agreement. To date, the Company has not made any milestone payments under the agreement. Aggregate potential milestone payments under this agreement are approximately \$125,000. The agreement expires upon the expiration of the last patent covered by the agreement. Based on currently issued patents and currently filed patent applications, this agreement will terminate on June 5, 2018.

**The Scripps Research Institute**

The Company entered into a license agreement with the Scripps Research Institute (Scripps) on March 14, 2000 whereby the Company was granted a worldwide exclusive license to technology and patents for the research, development and commercialization of products and services using engineered ZFPs, excluding the use of engineered ZFPs in plant agriculture, therapeutics and diagnostics. Pursuant to the agreement, the Company must

pay an annual minimum royalty of \$50,000 and royalties on product sales during the term of the agreement, for any products developed under the agreement. No milestone payments are payable under the agreement. Based on currently issued patents and currently filed patent applications, the Scripps agreement will terminate on June 5, 2018.

#### **The California Institute of Technology**

The Company entered into a license agreement with the California Institute of Technology (Cal Tech) on November 1, 2003 whereby the Company was granted a worldwide exclusive license to intellectual property covering the use of chimeric nucleases to stimulate gene targeting, in all fields except research tools and diagnostics. In an amendment to this agreement dated February 28, 2005, Sangamo was granted a worldwide exclusive license in all fields of use. Pursuant to the agreement, the Company has paid a license fee of 25,000 shares of unregistered Sangamo common stock, valued at \$129,500, which was considered a research and development expense. No costs or expenses have been incurred under this agreement. No royalties or milestone fees are payable under this agreement. Products and services developed under this agreement relate to the use of zinc finger nucleases (ZFNs) for therapeutic gene correction in human healthcare and gene targeting in plant agriculture. The agreement expires upon the expiration of the last patent covered by the agreement. Based on currently filed patent applications, the Cal Tech agreement will terminate on September 5, 2023.

#### **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.”

#### **Intellectual Property Related Advantages**

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

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

- Small molecules in development from both in-house drug discovery programs of pharmaceutical companies such as Pfizer, Merck and Eli Lilly, as well as from biotechnology companies with expertise and capabilities in small molecule discovery and development such as Millennium Pharmaceuticals and Exelixis.
- Monoclonal antibody companies and product candidates from certain biotechnology firms such as Genentech, Amgen, Medimmune, as well as Abgenix, Medarex, Cambridge Antibody Technology, HGSI and Protein Design Labs.
- Protein pharmaceuticals under development at pharmaceutical and biotechnology companies such as Amgen, Genentech, Johnson & Johnson, Lilly and Biogen and numerous other pharmaceutical and small biotechnology firms.
- Gene therapy companies who are developing gene-based products in clinical trials. None of these products have yet been approved. Our competitors in this category may include Cell Genesys, which has different versions of the GVAX(R) cancer vaccine in Phase 1, Phase 2 and Phase 3 clinical studies; GenVec, which is working on gene-based therapies such as BIOBYPASS(R) for the treatment of coronary artery disease and a gene therapy approach to AMD; and Valentis, which is conducting pivotal clinical studies of VLTS 934 for the treatment of PAD and which may be competitive with Sangamo's program in this area; and VirxSys, a gene delivery company that is developing a treatment for HIV/AIDS.
- Antisense therapeutics and RNA interference technology, or RNAi, which are two technologies that may compete with ZFP-Therapeutics in the development of novel therapeutic products acting through the regulation of gene expression. These technologies are being developed by numerous biotechnology companies including Isis, Sirna and Alnylam.

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

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

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

**GOVERNMENT REGULATION**

Before commencing clinical investigations in humans, we must submit to, and receive approval from, the 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 intend to file 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. Our partner, Edwards Lifesciences, also submitted a Phase 1 clinical protocol for review by the NIH RAC in the fourth quarter of 2003 and filed the first ZFP Therapeutic IND application with the FDA in February 2004. We have not applied for regulatory approvals with respect to any of our other technologies or

products under development. We anticipate that the research, development, and commercialization of any therapeutic products developed, either alone or with our strategic partners or collaborators, will be subject to extensive regulation in the United States and other countries.

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

Clinical trials are lengthy and are typically conducted in three sequential phases, but the phases may overlap or be combined. Each trial must be reviewed and approved by an independent ethics committee or institutional review board 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.

Outside the United States, our ability to market a product is contingent upon receiving marketing authorization from the appropriate regulatory authorities. The requirements governing the conduct of clinical trials, marketing authorization, pricing, and reimbursement vary widely from country to country. At present, foreign marketing authorizations are applied for at a national level; although, within the European Union (EU), registration procedures are available to companies wishing to market a product in more than one EU member state. If the regulatory authority is presented with adequate evidence of safety, quality, and efficacy, they will grant a marketing authorization. This foreign regulatory approval process involves all of the risks associated with FDA clearance discussed above.

We have hired personnel with expertise in regulatory affairs to assist us in obtaining appropriate regulatory approvals as required. In 2004 and 2005, 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**

Over the past three fiscal years, research and development expenses have consisted primarily of salaries and related personnel expenses, laboratory supplies, allocated facilities costs, subcontracted research expenses, and expenses for patent prosecution, trademark registration and technology licenses. Research and development expenses were \$11.4 million, \$11.0 million and \$10.2 million for 2005, 2004 and 2003, 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 focus increasingly on development of ZFP Therapeutics. Specifically, in order to develop ZFPs as commercially relevant therapeutics, we expect to expend additional resources for expertise in the manufacturing, regulatory affairs and clinical research aspects of ZFP Therapeutic development.

## EMPLOYEES

As of February 14, 2006, we had 62 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.

### Item 1A. Risk Factors

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

*We are conducting proprietary research to discover ZFP Therapeutic product candidates. These programs increase our financial risk of product failure, may significantly increase our research expenditures, and may involve conflicts with our collaborators and strategic partners. Our proprietary research programs consist of research which is funded solely by the Company and where the Company retains exclusive rights to therapeutic products generated by the research. This is in contrast to certain of our research programs that may be funded by corporate partners and in which we may share rights to any resulting products. We have conducted proprietary research since inception, however, in the past year, our strategy has shifted toward placing greater emphasis on proprietary research and therapeutic development and we expect this trend will continue in 2006 as we initiate 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, and our partner, Edwards Lifesciences, have initiated Phase 1 clinical trials in our respective lead ZFP Therapeutic programs, and ZFP Therapeutics have never before been tested 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 drug-related adverse events. However if our lead ZFP Therapeutic fails its initial safety study, it could reduce our ability to attract new investors and corporate partners. In January 2005, Sangamo filed an IND with the FDA for SB-509, a ZFP TF activator of VEGF-A, for the treatment of mild to moderate diabetic neuropathy. We 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 reported that we did not observe dose-limiting toxicity or any severe adverse drug-related events. We expect to present data from this trial in the first half of 2006 and to initiate a Phase 2 clinical trial of SB-509 in the second half of 2006. Edwards Lifesciences also filed an investigational new drug (IND) application with the U.S. Food and Drug Administration (FDA) on February 10, 2004 and initiated a Phase 1 clinical trial in humans in August, 2004 and a second in the first half of 2005. The first Phase 1 studies of a*



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ZFP Therapeutic will be a highly visible test of the Company's ZFP Therapeutic approach. Since we have increased our focus on ZFP Therapeutic research and development, investors will increasingly assess the value of the Company's technology based on the continued progress of ZFP Therapeutic products into and through clinical trials. If the initial safety study of our lead therapeutic was halted due to safety concerns, this would negatively affect the value of the Company's stock.

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

*We have limited experience in conducting clinical trials, and we may encounter unanticipated toxicity or adverse events or fail to demonstrate the efficacy, causing us to delay, suspend or terminate the development of our ZFP Therapeutics.* Our ZFP Therapeutics may fail to show the desired safety and efficacy in initial clinical trials. Even if we successfully complete Phase 1 trials, the FDA will require additional Phase 2 and Phase 3 clinical testing which involves significantly greater resources, commitments and expertise that may require us to enter into a collaborative relationship with a pharmaceutical company that would assume responsibility for late-stage development and commercialization.

*Our potential therapeutic products are subject to a lengthy and uncertain regulatory process, and we may encounter unanticipated toxicity or adverse events or fail to demonstrate efficacy, causing us to delay, suspend or terminate the development of a ZFP Therapeutics and if these potential products are not approved, we will not be able to commercialize those products.* The FDA must approve any human therapeutic products before they can be marketed in the United States. The process for receiving regulatory approval is long and uncertain, and a potential product may not withstand the rigors of testing under the regulatory approval processes.

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

Clinical trials are subject to oversight by institutional review boards and the FDA. In addition, our proposed clinical studies will require review from the Recombinant DNA Advisory Committee, or RAC, which is the advisory board to the National Institutes of Health, or NIH, focusing on clinical trials involving gene transfer. We will typically submit a proposed clinical protocol and other product-related information to the RAC three to six months prior to the expected IND filing date.

Clinical trials:

- must be conducted in conformance with the FDA's good clinical practices ICH guidelines and other applicable regulations;
- must meet requirements for institutional review board 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 our commercial partner, the FDA, or us at any time if it is believed that the subjects participating in these trials are being exposed to unacceptable health risks or if the FDA finds deficiencies in the IND or the conduct of these trials.

Clinical trials are lengthy and are typically conducted in three sequential phases, but the phases may overlap or be combined. Each trial must be reviewed and approved by an independent ethics committee or institutional review board before it can begin. Phase 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.

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

*The results of early Phase 1 trials are based on a small number of patients over a short period of time, and our success may not be indicative of results in a large number of patients or of long-term efficacy.* The results in early phases of clinical testing are based upon limited numbers of patients and a limited follow-up period. For example, the results from the Phase 1 clinical trial of our ZFP Therapeutic, SB-509 product, are expected to be available in the first half of 2006. The primary end point of the trial is clinical and laboratory safety, however we expect to be able to collect some preliminary efficacy data. Typically, our Phase 1 clinical trials for indications of safety enroll less than 50 patients. We anticipate that our Phase 2 clinical trials for efficacy would typically enroll approximately 100 patients. Actual results with more data points may not confirm favorable results from our earlier stage trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late stage clinical trials even after achieving promising results in earlier stage clinical trials. In addition, we do not yet know if early results will have a lasting effect. If a larger population of patients does not experience positive results, or if these results do not have a lasting effect, our products may not receive approval from the FDA. Failure to demonstrate the safety and effectiveness of our gene based products in larger patient populations could have a material adverse effect on our business that would cause our stock price to decline significantly.

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

*Our gene regulation and gene modification technology is relatively new, and if we are unable to use this technology in all our intended applications, it would limit our revenue opportunities.* Our technology involves a relatively new approach to gene regulation and gene modification. Although we have generated ZFP TFs for hundreds of gene sequences, we have not created ZFP TFs for all gene sequences and may not be able 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 done so in humans, and the failure to do so could restrict our ability to develop commercially viable products. If we, and our collaborators or strategic partners, are unable to extend our results to new commercially important genes, experimental animal

models, and human clinical studies, we may be unable to use our technology in all its intended applications. Also, delivery of ZFP TFs and ZFNs into cells and organisms, including humans, in these and other environments is limited by a number of technical hurdles, which we may be unable to surmount. This is a particular challenge for therapeutic applications of our technology that will require the use of gene transfer systems that may not be effective for the delivery of our ZFP TFs or ZFNs in a particular therapeutic application.

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

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

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

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

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

*Even if our product development efforts are successful and even if the requisite regulatory approvals are obtained, our ZFP Therapeutics may not gain market acceptance among physicians, patients, healthcare payers*

and the medical community. A number of additional factors may limit the market acceptance of products including the following:

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

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

*Our stock price is also influenced by public perception.* Reports of serious adverse events in a retroviral gene transfer trial for infants with X-linked severe combined immunodeficiency (X-linked SCID) in France and subsequent FDA actions putting related trials on hold in the United States had a significant negative impact on the public perception and stock price of certain companies involved in gene therapy. Stock prices of these companies declined whether or not the specific company was involved with retroviral gene transfer for the treatment of infants with SCID, or whether the specific company's clinical trials were placed on hold in connection with these events.

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

*We are at the development phase of operations and may not succeed or become profitable.* We began operations in 1995 and are in the early phases of ZFP Therapeutic product development. We have incurred significant losses and our net losses for the past three fiscal years ended 2005, 2004 and 2003 were \$13.3 million, \$13.8 million and \$10.4 million, respectively. To date, our revenues have been generated from Enabling Technology collaborations, strategic partners, and federal government research grants. In 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 include the need to:

- attract and retain qualified scientific and technical staff and management, particularly scientific staff with expertise to develop our early-stage technology into therapeutic products;
- obtain sufficient capital to support the expense of developing our technology platform and developing, testing, and commercializing products;
- develop a market for our products;

- successfully transition from a company with a research focus to a company capable of supporting commercial activities; and
- attract and enter into research collaborations with research and academic institutions and scientists.

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

The loss of our current or any future strategic partnering agreements would not only delay or terminate the potential development or commercialization of products we may derive from our technologies, but it may also delay or terminate our ability to test ZFP TFs for specific genes. If any strategic partner fails to conduct the collaborative activities successfully and in a timely manner, the preclinical or clinical development or commercialization of the affected product candidates or research programs could be delayed or terminated.

Our existing strategic partnering agreements are based on the achievement of milestones. Under the strategic partnering agreements, we expect to receive revenue for the research and development of a ZFP Therapeutic product and based on achievement of specific milestones. Achieving these milestones will depend, in part, on the efforts of our strategic partner as well as our own. In contrast, our historic Enabling Technology 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(R). 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;

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- recombinant proteins;
- gene therapy / cDNAs;
- antisense; and
- siRNA approaches
- For our Enabling Technology Applications:
  - *For protein production:* gene amplification, meganucleases, insulator technology;
  - *For target validation:* antisense, siRNA; and
  - *For plant agriculture:* recombination approaches, mutagenesis approaches, meganucleases;
- 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.

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

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

*We anticipate continuing to incur operating losses for the next several years. If material losses continue for a significant period, we may be unable to continue our operations.* We have generated operating losses since we began operations in 1995. The extent of our future losses and the timing of profitability are uncertain, and we expect to incur losses for the foreseeable future. We have been engaged in developing our ZFP TF technology since inception, which has and will continue to require significant research and development expenditures. In November 2005 we announced that we had 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, and federal government research grants. As of December 31, 2005, we had an accumulated deficit of approximately \$110.4 million. We expect to incur losses for the foreseeable future. These losses will increase as we expand and extend our research and development activities into human therapeutic product development. If the time required to generate significant product revenues and achieve profitability is longer than we currently anticipate, we may not be able to sustain our operations.

*We may be unable to raise additional capital, which would harm our ability to develop our technology and products.* We have incurred significant operating losses and negative operating cash flows since inception and have not achieved profitability. We expect capital outlays and operating expenditures to increase over the next several years as we expand our infrastructure and research and ZFP Therapeutic product development activities. While we believe our financial resources will be adequate to sustain our current operations at least through 2007, we may seek additional sources of capital through equity or debt financing. In addition, as we focus our efforts on proprietary human therapeutics, we will need to seek FDA approval of potential products, a process that could cost in excess of \$100 million per product. We cannot be certain that we will be able to obtain financing on terms acceptable to us, or at all. If adequate funds are not available, our business and our ability to develop our technology and ZFP Therapeutic products would be harmed.

*Our stock price has been volatile and may continue to be volatile, which could result in substantial losses for investors.* During the past two years, our common stock price has fluctuated significantly, ranging from a low of \$3.46 to a high of \$6.49 during the year ended December 31, 2005, and a low of \$3.00 to a high of \$8.02 during the year ended December 31, 2004. 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;
- 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 thinly traded, which means large transactions in our common stock may be difficult to conduct in a short time frame.* We have a low volume of daily trades in our common stock on the Nasdaq National Market. For example, the average daily trading volume in our common stock on the Nasdaq National Market over the ten-day trading period prior to February 1, 2006 was approximately 101,000 shares per day. Any large transactions in our common stock may be difficult to conduct and may cause significant fluctuations in the price of our common stock.

*Failure to attract, retain, and motivate skilled personnel and cultivate key academic collaborations will delay our product development programs and our research and development efforts.* We are a small company with 62 full-time employees as of February 14, 2006 and our success depends on our continued ability to attract, retain, and motivate highly qualified management and scientific personnel and our ability to develop and maintain important relationships with leading research and academic institutions and scientists. Competition for personnel and academic and other research collaborations is intense. The success of our technology development programs depends on our ability to attract and retain highly trained personnel and we have experienced a rate of employee turnover that we believe is typical of emerging biotechnology companies. If we lose the services of personnel with the necessary skills, it could significantly impede the achievement of our research and development objectives. We are not presently aware of any plans of specific employees to retire or otherwise leave the company. If we fail to negotiate additional acceptable collaborations with academic and other research institutions and scientists, or if our existing collaborations are unsuccessful, our ZFP Therapeutic development programs may be delayed or may not succeed.

*If conflicts arise between us and our collaborators, strategic partners, scientific advisors, or directors, these parties may act in their self-interest, which may limit our ability to implement our strategies.* If conflicts arise between our corporate or academic collaborators, strategic partners, or scientific advisors or directors and us, the other party may act in its self-interest, which may limit our ability to implement our strategies. Our license agreement with Edwards Lifesciences provides Edwards with worldwide, exclusive rights for ZFP Therapeutics “for the activation of VEGF and VEGF receptors for the treatment and prevention of ischemic cardiovascular and vascular disease in humans.” We have retained all rights to use our technology for all therapeutic applications of VEGF activation outside of the treatment and prevention of ischemic cardiovascular and vascular disease in humans. During the first quarter of 2005, Sangamo commenced a Phase 1 clinical trial for the treatment of diabetic neuropathy using a ZFP Therapeutic for the activation of VEGF. Edwards has stated that its rights include diabetic neuropathy and consequently our activities relating to diabetic neuropathy constitute a breach of the agreement. We strongly disagree with the Edwards’ assertion because diabetic neuropathy is a neurological disease and not an ischemic vascular disease and therefore is outside the scope of the Edwards license. Sangamo and Edwards are in discussions regarding this issue. Some of our academic collaborators and strategic partners are conducting multiple product development efforts within each area that is the subject of the collaboration with us. Our collaborators or strategic partners, however, may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by the collaborators or strategic partners or to which the collaborators or strategic partners have rights, may result in the withdrawal of partner support for our product candidates.

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

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

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

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

We are unable to exercise the same degree of control over intellectual property that we license from third parties as we exercise over our internally developed intellectual property. We 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;



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- 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 Okeanoikoites* Restriction Endonuclease" was granted on May 7, 2003 and forms the basis of Regional Phase patents in France, Germany, Great Britain, Ireland and Switzerland. The granted claims of the patent cover technologies used in our programs in targeted recombination and gene correction. On 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.

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

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

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

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

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

*Laws or public sentiment may limit the production of genetically modified agricultural products in the future, and these laws could reduce our 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 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. 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.

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 21% 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 the facilities we currently lease are sufficient for the foreseeable future.

**Item 3. *Legal Proceedings***

We are not a party to any material litigation.

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

Not applicable.

**PART II**

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

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

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

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

**Common Stock**

	Price	
	High	Low
Year ended December 31, 2004		
First Quarter	\$8.02	\$5.28
Second Quarter	\$6.87	\$5.60
Third Quarter	\$5.85	\$3.00
Fourth Quarter	\$6.00	\$3.75
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

**Holders**

As of February 14, 2006 there were approximately 101 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.

**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**

	Year Ended December 31,				
	2005	2004	2003	2002	2001
	(In thousands, except per share data)				
<b>Statement of Operations Data:</b>					
Total revenues	\$ 2,484	\$ 1,315	\$ 2,579	\$ 4,343	\$ 4,885
Operating expenses:					
Research and development	11,419	11,046	10,187	12,213	12,952
General and administrative	4,512	4,256	3,594	3,815	3,638
Stock-based compensation(1)	301	663	567	1,499	3,674
Restructuring charge	—	—	—	371	—
Goodwill impairment	—	—	—	15,250	—
Patent impairment	—	—	—	2,760	—
Acquired in-process research and development	—	—	—	—	13,062
Total operating expenses	<u>16,232</u>	<u>15,965</u>	<u>14,348</u>	<u>35,908</u>	<u>33,326</u>
Loss from operations	(13,748)	(14,650)	(11,769)	(31,565)	(28,441)
Interest income, net	850	620	752	1,366	3,192
Other income/(expense)	(395)	212	584	435	—
Net loss	<u>\$ (13,293)</u>	<u>\$ (13,818)</u>	<u>\$ (10,433)</u>	<u>\$ (29,764)</u>	<u>\$ (25,249)</u>
Basic and diluted net loss per common share	<u>\$ (0.51)</u>	<u>\$ (0.55)</u>	<u>\$ (0.42)</u>	<u>\$ (1.22)</u>	<u>\$ (1.09)</u>
Shares used in computing basic and diluted net loss per common share	<u>25,855</u>	<u>25,126</u>	<u>24,811</u>	<u>24,493</u>	<u>23,120</u>

	Year Ended December 31,				
	2005	2004	2003	2002	2001
	(In thousands)				
<b>(1) Stock-Based Compensation:</b>					
Research and development stock-based compensation	\$300	\$649	\$451	\$1,150	\$2,562
General and administrative stock-based compensation	<u>1</u>	<u>14</u>	<u>116</u>	<u>349</u>	<u>1,112</u>
Total stock-based compensation	<u>\$301</u>	<u>\$663</u>	<u>\$567</u>	<u>\$1,499</u>	<u>\$3,674</u>

	December 31,				
	2005	2004	2003	2002	2001
	(In thousands)				
<b>Balance Sheet Data:</b>					
Cash, cash equivalents, marketable securities, and interest receivable	\$ 47,174	\$ 33,520	\$ 44,343	\$ 52,575	\$ 62,560
Working capital	41,668	32,028	43,714	52,115	61,102
Total assets	48,983	34,725	46,232	56,227	85,017
Accumulated deficit	(110,408)	(97,115)	(83,297)	(72,864)	(43,100)
Total stockholders' equity	37,814	32,377	44,661	54,246	82,349

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

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, 2005, 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, 2005, we had an accumulated deficit of \$110.4 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 2005, we have placed 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 it increases our financial risk by increasing expenses associated with product development. We have filed an Investigational New Drug (IND) application with the U.S. Food and Drug Administration (FDA) and have initiated a Phase 1 clinical trial of a ZFP Therapeutic in patients with diabetic neuropathy during the first quarter of 2005. Development of novel therapeutic products is costly and is subject to a lengthy and uncertain regulatory process by the FDA. Our future products are gene-based therapeutics. Adverse events in both our own clinical program and other programs in gene therapy may have a negative impact on regulatory approval, the willingness of potential commercial partners to enter into agreements and the perception of the public.

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

expenses. As we pursue commercial development of our therapeutic leads we expect the business aspects of the Company to become more complex. We may be required in the future to add personnel and incur additional costs related to the maturity of our business.

#### **Critical Accounting Estimates**

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

##### ***Revenue Recognition***

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

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

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

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

##### ***Stock-Based Compensation***

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



the Black-Scholes model. Pursuant to FAS 123, as amended by FAS 148, "Accounting for Stock-Based Compensation — Transition and Disclosure," the effect on net loss and related net loss per share has been calculated, had compensation cost for stock-based compensation plans been determined based upon the fair value method prescribed under FAS 123 (See Note 1 — Organization and Summary of Significant Accounting Policies).

## Results of Operations

### Years Ended December 31, 2005, 2004 and 2003

#### Total Revenues

	Year Ended December 31,							
	2005	2004	Change	% Change	2004	2003	Change	% Change
	(In thousands, except percentage values)							
<b>Revenues:</b>								
Collaboration agreements	\$1,832	\$ 947	\$ 885	93%	\$ 947	\$2,205	\$(1,258)	(57)%
Federal government research grants	652	368	284	77%	368	374	(6)	(2)%
Total revenues	\$2,484	\$1,315	\$1,169	89%	\$1,315	\$2,579	\$(1,264)	(49)%

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 \$1.8 million in 2005, compared to \$947,000 in 2004, and \$2.2 million in 2003. 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. The decrease in 2004 from 2003 was principally attributable to decreased revenues of approximately \$915,000 from our therapeutics partnership with Edwards, due to completion of our preclinical research and Edwards' payments for those activities under the agreement, as well as decreased revenues of \$343,000 associated with other Enabling Technology collaborations. Federal government research grant revenues were \$652,000 in 2005, \$368,000 in 2004, and \$374,000 in 2003. The increase in 2005 over 2004 and 2003 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 and 2003. We plan to continue to apply for federal government research grants.

*Operating Expenses*

	Year Ended December 31,							
	2005	2004	Change	% Change	2004	2003	Change	% Change
	(In thousands, except percentage values)							
<b>Operating expenses:</b>								
Research and development	\$11,419	\$11,046	\$ (373)	(3)%	\$11,046	\$10,187	\$ (859)	(8)%
General and administrative	4,512	4,256	(256)	(6)%	4,256	3,594	(662)	(18)%
Stock-based compensation	301	663	362	55%	663	567	(96)	(17)%
<b>Total operating expenses</b>	<b>\$16,232</b>	<b>\$15,965</b>	<b>\$ (267)</b>	<b>(2)%</b>	<b>\$15,965</b>	<b>\$14,348</b>	<b>\$(1,617)</b>	<b>(11)%</b>

*Research and development expenses*

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

Research and development expenses were \$11.4 million in 2005, compared to \$11.0 million in 2004 and \$10.2 million in 2003. The increase in 2005 from 2004 was principally due to increased expenses associated with our Phase 1 clinical trial in patients with diabetic neuropathy of approximately \$577,000, 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. This was partially offset by decreased expenses associated with pre-clinical studies of \$915,000 and facilities of approximately \$286,000 and \$286,000, respectively. The decrease in facility-related expenses was primarily caused by decreased depreciation expense associated with laboratory equipment. The increase of \$859,000 in 2004 from 2003 was principally due to pre-clinical studies and manufacturing costs of \$1.8 million in connection with our diabetic neuropathy program. This was partially offset by decreased expenses for salaries and related benefits of \$687,000, due to lower headcount, and laboratory supplies of \$343,000.

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 Therapeutics	Edwards	Clinical
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
ZFP TF-engineered cell lines for the treatment of diabetes	LifeScan	Research

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

**Internal Programs**

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

Due to the early stage of the Company's various internal research and development projects, the Company does not track costs associated with its internal projects on a project-by-project basis. Drug development is inherently uncertain and the successful completion of our development programs is subject to numerous technological challenges and risks and we cannot presently estimate anticipated completion dates for any of our programs. Material cash inflows associated with the sale of products, if any, which result from our research efforts are not expected for at least five years. See 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, professional fees, allocated facilities costs and other general corporate expenses. As we pursue commercial development of our therapeutic leads, we expect the business aspects of the Company to become more complex. We may be required in the future to add personnel and incur additional costs related to the maturity of our business.

General and administrative expenses were \$4.5 million during 2005, \$4.3 million in 2004 and \$3.6 million in 2003. The increase of \$256,000 was principally due to increased salary and benefit expenses of approximately \$394,000, partially offset by decreased expenses associated with corporate communications of approximately \$108,000. The increase of \$662,000 in 2004 from 2003 was principally due to increased expenses in connection with programs for compliance with Section 404 of the Sarbanes-Oxley Act of 2002, the related regulations regarding our required assessment of our internal controls over financial reporting and our external auditors' audit of that assessment of approximately \$470,000 as well as increased expenses of \$110,000 related to corporate communications.

*Stock-based compensation*

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

Stock-based compensation expenses were \$301,000 for 2005, \$663,000 for 2004 and \$567,000 related to 2003. The decrease in 2005 from 2004 was attributable to lower non-employee stock-based compensation expense. The increase in 2004 from 2003 of \$96,000 was attributable to higher non-employee stock-based compensation expense.

**Interest income, net**

	Year Ended December 31,							
	<u>2005</u>	<u>2004</u>	<u>Change</u>	<u>% Change</u>	<u>2004</u>	<u>2003</u>	<u>Change</u>	<u>% Change</u>
	(In thousands, except percentage values)							
Interest income, net	\$850	\$620	\$ 230	37%	\$620	\$752	\$ (132)	(18)%

**Interest income, net**

Net interest income was \$850,000 in 2005, as compared to \$620,000 in 2004, and \$752,000 in 2003. The increase in 2005 from 2004 is related to interest earned on higher average cash and investment balances. The decrease in 2004 from 2003 is related to interest earned on lower average cash and investment balances.

**Other income/(expense)**

	Year Ended December 31,							
	<u>2005</u>	<u>2004</u>	<u>Change</u>	<u>% Change</u>	<u>2004</u>	<u>2003</u>	<u>Change</u>	<u>% Change</u>
	(In thousands, except percentage values)							
Other income/ (expense)	\$(395)	\$212	\$ (607)	(286)%	\$212	\$584	\$ (372)	(64)%

**Other income/(expense)**

During 2005, other expense of \$395,000 was comprised of a net loss on foreign currency translation of \$374,000 and an 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 an other than temporary loss on our marketable securities of \$71,000. During 2003, other income of \$584,000 was principally comprised of a net gain on foreign currency translation of \$298,000, an insurance settlement of \$180,000 related to a equipment shipping claim and a research and development credit of \$112,000.

We incurred net operating losses in 2005, 2004 and 2003, 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, 2005, we had cash, cash equivalents, investments and interest receivable totaling \$47.2 million.

Net cash used in operating activities was \$4.1 million in 2005, \$10.2 million in 2004, and \$7.4 million in 2003. In all periods, net cash used in operating activities was primarily due to funding of net operating losses. During 2005, the use of cash related to our net operating loss of \$13.3 million and net increases in asset balances of \$408,000. This was partially offset by net increases in liability balances of \$8.8 million, principally due to an increase in deferred revenue of \$7.2 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. Other offsets to our net operating loss were non-cash charges of \$536,000 and amortization on investments of \$214,000. 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 on investments of \$868,000. During 2003, the use of cash related to the net operating loss of \$10.4 million, partially offset by non-cash charges and net increases in asset balances of \$1.8 million and by amortization on investments of \$1.1 million.

Net cash provided by (used in) investing activities was \$(4.4) million in 2005, \$8.4 million in 2004 and \$(623,000) in 2003. 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 \$18.4 million in 2005, \$553,000 in 2004 and \$227,000 in 2003. 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 2005, 2004 and 2003 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, in support of our product development endeavors, we believe that the available cash resources, funds received from corporate collaborators, strategic partners and federal government research grants will be sufficient to finance our operations through 2007. 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, 2005, Sangamo had net operating loss carryforwards for federal income tax purposes of approximately \$62.7 million, which expire in the years 2010 through 2025. The Company also has state operating loss carryforwards of approximately \$28.3 million, which expire in the years 2006 through 2015. The Company also has federal and state research and development tax credits of \$1.8 million and \$1.9 million, respectively. The federal research credits will begin to expire in the year 2018 through 2025 and the state research credits have no expiration date. Utilization of the Company's net operating loss may be subject to substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code and similar state provisions. Such an annual limitation could result in the expiration of the net operating loss before utilization.

#### Contractual Obligations and Commercial Commitments

As of December 31, 2005 we had contractual obligations and commercial commitments as follows (in thousands):

Contractual Obligations	Total	Payments Due by Period			
		Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Operating leases	\$4,139	\$ 433	\$1,368	\$1,473	\$ 865
License obligations	1,436	315	1,121	—	—
Total contractual obligations	<u>\$5,575</u>	<u>\$ 748</u>	<u>\$2,489</u>	<u>\$1,473</u>	<u>\$ 865</u>

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 November 2005, the FASB issued FSP FAS 115-1 and FAS 124-1, "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments" ("FSP FAS 115-1"), which provides guidance on determining when investments in certain debt and equity securities are considered impaired, whether that impairment is other-than-temporary, and on measuring such impairment loss. FSP FAS 115-1 also includes accounting considerations subsequent to the recognition of an other-than temporary impairment and requires certain disclosures about unrealized losses that have not been recognized as other-than-temporary impairments. FSP FAS 115-1 is required to be applied to reporting periods beginning after December 15, 2005. We are required to adopt FSP FAS 115-1 in the first quarter of 2006. We do not expect the adoption of this statement will have a material impact on our results of operations or financial condition.

In June 2005, the FASB issued SFAS No. 154, *Accounting Changes and Error Corrections*, a replacement of APB No. 20, *Accounting Changes*, and SFAS No. 3, *Reporting Accounting Changes in Interim Financial Statements*. SFAS No. 154 changes the requirements for accounting for and reporting a change in accounting principle. Previously, most voluntary changes in accounting principles required recognition via a cumulative effect adjustment within the net income of the period of the change. SFAS No. 154 requires retrospective application to prior periods' financial statements unless it is impracticable to determine either the period-specific effects or the

cumulative effect of the change. SFAS No. 154 is effective for accounting changes made in fiscal years beginning after December 15, 2005; however, this statement does not change the transition provisions of any existing accounting pronouncements. The Company does not believe the adoption of SFAS No. 154 will have a material effect on its consolidated financial position, results of operations or cash flows.

In December 2004, the Financial Accounting Standards Board, or FASB, issued a revision of Financial Accounting Standards No. 123, or SFAS 123R, which requires all share-based payments to employees and directors, including grants of employee stock options, to be recognized in the income statement based on their values. We expect to calculate the value of share-based payments under SFAS 123R on a basis substantially consistent with the fair value approach of SFAS 123. We will adopt SFAS 123R in our fiscal quarter beginning January 1, 2006, using the modified prospective method. We expect the adoption of SFAS 123R will have a material impact on our results of operations in that fiscal quarter and in each subsequent quarter, although it will have no impact on our overall liquidity. We cannot reasonably estimate the impact of adoption because it will depend on levels of share-based payments granted in the future as well as certain assumptions that can materially affect the calculation of the value share-based payments to employees and directors. However, had we adopted SFAS 123R in prior periods, the impact of the standard would have approximated the impact of SFAS 123 as described in the disclosure of pro forma net loss and pro forma loss per common share in *Note 1 of Notes to Consolidated Financial Statements* included under Item 8 of this Annual Report on Form 10-K.

**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, 2005, 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 loss on foreign currency translation of \$374,000 in 2005 and gains on foreign currency translation of \$261,000 and \$298,000 for 2004 and 2003, respectively.

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Item 8. *Financial Statements and Supplementary Data*

SANGAMO BIOSCIENCES, INC.

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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, 2005 and 2004, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2005. 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, 2005 and 2004, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2005, in conformity with U.S. generally accepted accounting principles.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Sangamo Biosciences Inc.'s internal control over financial reporting as of December 31, 2005, 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 13, 2006 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Palo Alto, California  
March 13, 2006



**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholders  
Sangamo BioSciences, Inc.

We have audited management's assessment, included in the accompanying "Management's Report on Internal Control over Financial Reporting" included in Item 9A, that Sangamo BioSciences, Inc. maintained effective internal control over financial reporting as of December 31, 2005, 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, 2005, 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, 2005, 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, 2005 and 2004, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2005 and our report dated March 13, 2006 and expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

Palo Alto, California  
March 13, 2006

## SANGAMO BIOSCIENCES, INC.

## CONSOLIDATED BALANCE SHEETS

	December 31,	
	2005	2004
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 18,507	\$ 8,626
Marketable securities	28,449	24,634
Interest receivable	218	260
Accounts receivable, net of allowance for doubtful accounts of \$0 and \$85,000 for 2005 and 2004, respectively	971	569
Prepaid expenses	317	287
Total current assets	48,462	34,376
Property and equipment, net	472	318
Other assets	49	31
Total assets	<u>\$ 48,983</u>	<u>\$ 34,725</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 1,534	\$ 906
Accrued compensation and employee benefits	933	657
Deferred revenue	4,327	785
Total current liabilities	6,794	2,348
Deferred revenue, non-current portion	4,375	—
Total liabilities	11,169	2,348
Commitments and contingencies		
Stockholders' equity:		
Common stock, \$0.01 par value; 80,000,000 shares authorized, 30,570,912 and 25,271,059 shares issued and outstanding at December 31, 2005 and 2004, respectively	148,162	129,482
Accumulated deficit	(110,408)	(97,115)
Accumulated other comprehensive income	60	10
Total stockholders' equity	37,814	32,377
Total liabilities and stockholders' equity	<u>\$ 48,983</u>	<u>\$ 34,725</u>

See accompanying Notes to Consolidated Financial Statements.

## SANGAMO BIOSCIENCES, INC.

## CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2005	2004	2003
	(In thousands, except per share amounts)		
Revenues:			
Collaboration agreements	\$ 1,832	\$ 947	\$ 2,205
Federal government research grants	652	368	374
Total revenues	2,484	1,315	2,579
Operating expenses:			
Research and development (excludes \$300, \$649 and \$451 of stock-based compensation expense for 2005, 2004 and 2003, respectively)	11,419	11,046	10,187
General and administrative (excludes \$1, \$14 and \$116 of stock-based compensation expense for 2005, 2004 and 2003, respectively)	4,512	4,256	3,594
Stock-based compensation	301	663	567
Total operating expenses	16,232	15,965	14,348
Loss from operations	(13,748)	(14,650)	(11,769)
Interest income, net	850	620	752
Other income/(expense)	(395)	212	584
Net loss	<u>\$(13,293)</u>	<u>\$(13,818)</u>	<u>\$(10,433)</u>
Basic and diluted net loss per share	<u>\$ (0.51)</u>	<u>\$ (0.55)</u>	<u>\$ (0.42)</u>
Shares used in computing basic and diluted net loss per share	<u>25,855</u>	<u>25,126</u>	<u>24,811</u>

See accompanying Notes to Consolidated Financial Statements.

SANGAMO BIOSCIENCES, INC.

CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

	Common Stock		Deferred Stock Compensation	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
	Shares	Amount				
Balances at December 31, 2002	24,740,713	\$ 127,234	\$ (231)	\$ (72,864)	\$ 107	\$ 54,246
Issuance of common stock upon exercise of options, net of repurchases	71,578	14	—	—	—	14
Issuance of common stock in connection with license agreement	25,000	130	—	—	—	130
Issuance of common stock under employee stock purchase plan	116,952	213	—	—	—	213
Amortization of deferred stock compensation	—	—	215	—	—	215
Vesting of non-qualified stock options	—	388	—	—	—	388
Reversal of deferred compensation due to employee terminations	—	(52)	15	—	—	(37)
Comprehensive loss:						
Unrealized loss on investments	—	—	—	—	(81)	(81)
Other than temporary loss	—	—	—	—	6	6
Net loss	—	—	—	(10,433)	—	(10,433)
Comprehensive loss	—	—	—	—	—	(10,508)
Balances at December 31, 2003	24,954,243	127,927	(1)	83,297	32	44,661
Issuance of common stock upon exercise of options, net of repurchases	120,740	294	—	—	—	294
Issuance of common stock in connection with license agreement	62,500	340	—	—	—	340
Issuance of common stock under employee stock purchase plan	133,576	259	—	—	—	259
Amortization of deferred stock compensation	—	—	1	—	—	1
Vesting of non-qualified stock options	—	662	—	—	—	662
Comprehensive loss:						
Unrealized loss on investments	—	—	—	—	(93)	(93)
Other than temporary loss	—	—	—	—	71	71
Net loss	—	—	—	(13,818)	—	(13,818)
Comprehensive loss	—	—	—	—	—	(13,840)
Balances at December 31, 2004	25,271,059	129,482	—	(97,115)	10	32,377
Issuance of common stock in connection with registered direct offering and upon exercise of stock options	5,218,239	18,115	—	—	—	18,115
Issuance of common stock under employee stock purchase plan	81,614	264	—	—	—	264
Vesting of non-qualified stock options	—	301	—	—	—	301
Comprehensive loss:						
Unrealized loss on investments	—	—	—	—	29	(29)
Other than temporary loss	—	—	—	—	21	21
Net loss	—	—	—	(13,293)	—	(13,293)
Comprehensive loss	—	—	—	—	—	(13,301)
Balances at December 31, 2005	30,570,912	\$ 148,162	\$ —	\$ (110,408)	\$ 60	\$ 37,814

See accompanying Notes to Consolidated Financial Statements.

SANGAMO BIOSCIENCES, INC.  
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2005	2004	2003
	(In thousands)		
<b>Operating activities:</b>			
Net loss	\$(13,293)	\$(13,818)	\$(10,433)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	274	611	847
Amortization of premium/discount on investment	214	868	1,145
Net (gain) loss on disposal of property and equipment	—	—	(112)
Realized loss on investment	21	71	6
Issuance of common stock in connection with license agreement	—	340	130
Amortization of deferred stock compensation	—	1	178
Other stock-based compensation	301	662	389
Forgiveness of notes receivable	—	—	188
Changes in operating assets and liabilities:			
Interest receivable	42	228	(56)
Accounts receivable	(402)	89	440
Prepaid expenses and other assets	(48)	7	248
Accounts payable and accrued liabilities	693	91	(122)
Accrued compensation and employee benefits	276	21	(33)
Deferred revenue	7,853	665	(255)
Net cash (used in) operating activities	(4,069)	(10,164)	(7,440)
<b>Investing activities:</b>			
Purchases of investments	(33,518)	(20,702)	(44,803)
Maturities of investments	29,518	29,160	44,028
Proceeds from disposal of property and equipment	—	—	216
Purchases of property and equipment	(428)	(24)	(64)
Net cash provided by/(used in) investing activities	(4,428)	8,434	(623)
<b>Financing activities:</b>			
Proceeds from issuance of common stock	18,379	553	227
Net cash provided by financing activities	18,379	553	227
Net increase/(decrease) in cash and cash equivalents	9,882	(1,177)	(7,836)
Cash and cash equivalents, beginning of period	8,626	9,803	17,639
Cash and cash equivalents, end of period	<u>\$ 18,507</u>	<u>\$ 8,626</u>	<u>\$ 9,803</u>

See accompanying Notes to Consolidated Financial Statements.

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

**1. Organization and Summary of Significant Accounting Policies**

*Sangamo and Basis of Presentation*

Sangamo BioSciences, Inc. ("Sangamo") was incorporated in the State of Delaware on June 22, 1995 and is focused on the development and commercialization of novel transcription factors for 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, 2005, along with expected revenues from Enabling Technology collaborations and strategic partnerships, will be adequate to fund its operations through 2007. 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.

*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 \$18.5 million and \$8.6 million at December 31, 2005 and 2004, 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. 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). Unrealized holding gains and losses are included in accumulated other comprehensive income. Gains and losses on securities classified as available-for-sale is also included in interest income, which is determined using the specific identification method. The Company recorded other-than-temporary losses on its investments of \$21,000, \$71,000 and \$6,000 for 2005, 2004 and 2003, respectively.

## SANGAMO BIOSCIENCES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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

	Amortized Cost	Gross Unrealized Gains/ (Losses)	Estimated Fair Value
<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
<b>December 31, 2004</b>			
U.S. government investments:			
Maturing within 1 year	\$ 7,243	\$ (2)	\$ 7,241
Maturing between 1 and 2 years	7,087	(42)	7,045
Total government investments	14,330	(44)	14,286
Corporate debt investments:			
Maturing within 1 year	3,786	3	3,789
Maturing between 1 and 2 years	6,586	(27)	6,559
Total corporate investments	10,372	(24)	10,348
Total available-for-sale investments	\$ 24,702	\$ (68)	\$ 24,634

**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

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 loss of \$374,000 was recorded during 2005. Gains of \$261,000 and \$298,000 were recorded during 2004 and 2003, respectively.

***Comprehensive Loss***

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Comprehensive loss for the years ended December 31, 2005, 2004 and 2003 is included in the statement of stockholders' equity. Comprehensive loss includes all changes in equity during a period from non-owner sources. These items include unrealized gains/(losses) on investments and foreign currency translation adjustments.

***Revenue Recognition***

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

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

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



## SANGAMO BIOSCIENCES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

include salaries and other personnel-related expenses, facility costs, supplies and depreciation of facilities and laboratory equipment, as well as the cost of funding research at universities and other research institutions, and are expensed as incurred. Costs to acquire technologies that are utilized in research and development and that have no alternative future use are expensed as incurred.

**Stock-Based Compensation**

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

	Year Ended December 31,		
	2005	2004	2003
	(In thousands, except per share data)		
Net loss:			
As reported	\$ (13,293)	\$ (13,818)	\$ (10,433)
Less: stock-based compensation expense determined under the fair value based method	(2,560)	(4,297)	(2,515)
Pro forma net loss	\$ (15,853)	\$ (18,115)	\$ (12,948)
Basic and diluted net loss per share:			
As reported	\$ (0.51)	\$ (0.55)	\$ (0.42)
Pro forma	\$ (0.61)	\$ (0.72)	\$ (0.52)

The above pro forma effect may not be representative of that to be expected in future years, due to subsequent years including additional grants and related vesting. The fair value for all options granted in 2005, 2004, and 2003 was estimated at the date of grant using the Black-Scholes method with the following weighted-average assumptions:

	Year Ended December 31,		
	2005	2004	2003
Risk-free interest rate	4.4%	3.5%	3.1%
Expected life of option	5 yrs	5 yrs	5 yrs
Expected dividend yield of stock	0%	0%	0%
Expected volatility	1.00	1.08	1.08

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

**Income Taxes**

Sangamo accounts for income taxes as required by FAS No. 109, "Accounting for Income Taxes." Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax

## SANGAMO BIOSCIENCES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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. There were 709,085 shares excluded from the net loss per share computation for 2005. The following table presents the calculation of historical basic and diluted net loss per common share (in thousands, except per share data):

	Year Ended December 31,		
	2005	2004	2003
Net loss	\$ (13,293)	\$ (13,818)	\$ (10,433)
Basic and diluted:			
Weighted-average shares of common stock outstanding	25,855	25,126	24,816
Less: weighted-average shares subject to repurchase	—	—	(5)
Shares used in computing basic and diluted net loss per share	25,855	25,126	24,811
Basic and diluted net loss per share	\$ (0.51)	\$ (0.55)	\$ (0.42)

**Recent Accounting Pronouncements**

In November 2005, the FASB issued FSP FAS 115-1 and FAS 124-1, "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments" ("FSP FAS 115-1"), which provides guidance on determining when investments in certain debt and equity securities are considered impaired, whether that impairment is other-than-temporary, and on measuring such impairment loss. FSP FAS 115-1 also includes accounting considerations subsequent to the recognition of an other-than temporary impairment and requires certain disclosures about unrealized losses that have not been recognized as other-than-temporary impairments. FSP FAS 115-1 is required to be applied to reporting periods beginning after December 15, 2005. We are required to adopt FSP FAS 115-1 in the first quarter of 2006. We do not expect the adoption of this statement will have a material impact on our results of operations or financial condition.

In June 2005, the FASB issued SFAS No. 154, *Accounting Changes and Error Corrections*, a replacement of APB No. 20, *Accounting Changes*, and SFAS No. 3, *Reporting Accounting Changes in Interim Financial Statements*. SFAS No. 154 changes the requirements for accounting for and reporting a change in accounting principle. Previously, most voluntary changes in accounting principles required recognition via a cumulative effect adjustment within the net income of the period of the change. SFAS No. 154 requires retrospective application to prior periods' financial statements unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. SFAS No. 154 is effective for accounting changes made in fiscal years beginning after December 15, 2005; however, this statement does not change the transition provisions of any existing accounting pronouncements. The Company does not believe the adoption of SFAS No. 154 will have a material effect on its consolidated financial position, results of operations or cash flows.

In December 2004, the Financial Accounting Standards Board, or FASB, issued a revision of Financial Accounting Standards No. 123, or SFAS 123R, which requires all share-based payments to employees and directors, including grants of employee stock options, to be recognized in the income statement based on their

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

values. We expect to calculate the value of share-based payments under SFAS 123R on a basis substantially consistent with the fair value approach of SFAS 123. We will adopt SFAS 123R in our fiscal quarter beginning January 1, 2006, using the modified prospective method. We expect the adoption of SFAS 123R will have a material impact on our results of operations in that fiscal quarter and in each subsequent quarter, although it will have no impact on our overall liquidity. We cannot reasonably estimate the impact of adoption because it will depend on levels of share-based payments granted in the future as well as certain assumptions that can materially affect the calculation of the value share-based payments to employees and directors. However, had we adopted SFAS 123R in prior periods, the impact of the standard would have approximated the impact of SFAS 123 as described in the disclosure of pro forma net loss and pro forma loss per share in the Stock Based Compensation section above.

**2. Major Customers, Partnerships and Strategic Alliances**

In January 2000, we announced a therapeutic product development collaboration with Edwards Lifesciences Corporation. Under the agreement, we have licensed to Edwards, on a worldwide, exclusive basis, ZFP Therapeutics for use in the activation of VEGFs and VEGF receptors in ischemic cardiovascular and vascular diseases. Edwards purchased a \$5.0 million note that converted, together with accrued interest, into 333,333 shares of common stock at the time of our initial public offering (IPO) at the IPO price. In March 2000, Edwards purchased a \$7.5 million convertible note in exchange for a right of first refusal for three years to negotiate a license for additional ZFP Therapeutics in cardiovascular and peripheral vascular diseases. That right of first refusal was not exercised and terminated in March 2003. Together with accrued interest, this note converted into common stock at the time of our initial public offering at the IPO price. Through 2001, we received \$2.0 million in research funding from Edwards and a \$1.4 million milestone payment for delivery of a lead ZFP Therapeutic product candidate. In November 2002, Edwards signed an amendment to the original agreement and agreed to provide up to \$3.5 million in research and development funding, including \$2.95 million for research and development activities performed in 2002 and 2003. The filing of the IND for PAD in 2004, and the achievement of other research-related milestones in 2003, triggered a total of \$1.0 million in milestone payments from Edwards Lifesciences in the first quarter of 2004. We have retained all rights to use our technology for therapeutic applications of VEGF activation outside of ischemic cardiovascular and vascular diseases, including use in wound healing and neurological disorders.

There were no revenues attributable to milestone achievement and collaborative research and development performed under the Edwards agreement during 2005. Revenues were \$615,000 and \$1.5 million for 2004 and 2003, respectively. There were no related costs and expenses incurred for services performed under the Edwards agreement for either 2005 or 2004. Costs and expenses under the agreement were \$1.4 million for 2003. We have no future commitments related to these agreements. Revenues attributable to milestone achievement and collaborative research and development performed under the Edwards agreement were 0%, 47% and 59% for 2005, 2004 and 2003, respectively, of total revenues earned by Sangamo. As of December 31, 2005 and 2004, there were no amounts owed the Company under the Edwards agreements.

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

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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

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

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 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 quarter of 2005, we received \$775,000 and \$500,000 in research-related funding under our agreements with Pfizer. Revenues attributable to collaborative research and development performed under the Pfizer agreement were \$790,000 and \$42,000 during 2005 and 2004, respectively. Related costs and expenses incurred under the Pfizer agreements were \$154,000 during 2005. There were no costs or expenses incurred under the Pfizer agreement during 2004. As of December 31, 2005 and 2004 accounts receivable from Pfizer represented 80% and 88%, respectively, of our total accounts receivable balance.

In October 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 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.

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. 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 us of \$7.5 million and agreed to purchase up to \$4 million of our common stock in the next financing transaction meeting certain criteria. 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 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

## SANGAMO BIOSCIENCES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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 twenty-five percent (25%) of any cash consideration received by DAS under such sublicenses. Revenue 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 \$625,000 during 2005. Revenues attributable to collaborative research and development performed under the DAS agreement were \$51,000 during 2005. Related costs and expenses incurred under the DAS agreement were \$51,000 during 2005.

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. 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.

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.

### 3. Property and Equipment

Property and equipment consist of the following:

	December 31,	
	2005	2004
	(In thousands)	
Laboratory equipment	\$ 2,155	\$ 1,728
Furniture and fixtures	726	725
Leasehold improvements	1,658	1,658
	4,539	4,111
Less accumulated depreciation	(4,067)	(3,793)
	<u>\$ 472</u>	<u>\$ 318</u>

## SANGAMO BIOSCIENCES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**4. 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 \$620,000 for 2005, 2004 and 2003. Future minimum payments under contractual obligations and commercial commitments at December 31, 2005 consist of the following (in thousands):

<u>Fiscal Year:</u>	<u>Operating Lease</u>	<u>License Agreements</u>
2006	\$ 434	\$ 315
2007	444	1,121
2008	456	—
2009	467	—
2010	479	—
Thereafter	1,859	—
Total minimum payments	<u>\$ 4,139</u>	<u>\$ 1,436</u>

**5. 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.

***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.

SANGAMO BIOSCIENCES, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A summary of Sangamo's stock option activity follows:

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

There were no shares subject to Sangamo's right of repurchase as of December 31, 2005. The weighted-average fair value per share of options granted during 2005, 2004, and 2003 was \$5.02, \$4.07, and \$4.25, respectively.

The following table summarizes information with respect to stock options outstanding at December 31, 2005:

Range of Exercise Price	Options Outstanding	
	Number of Shares	Weighted Average Remaining Contractual Life (In Years)
\$ 0.05 - \$ 0.17	573,583	1.97
\$ 0.23 - \$ 3.61	497,745	6.71
\$ 3.81 - \$ 5.19	502,674	8.72
\$ 5.36 - \$ 7.49	700,916	7.21
\$ 7.57 - \$14.60	486,179	5.43
\$14.87 - \$38.00	113,000	5.17
	<u>3,874,097</u>	<u>6.59</u>

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

## SANGAMO BIOSCIENCES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

recognized deferred stock compensation of \$6.8 million in 2000. Deferred stock compensation has been fully amortized to expense over the vesting term of the option using the graded vesting method.

Sangamo did not grant any nonqualified common stock options to consultants during 2005. In 2004 and 2003, the Company granted 10,000 nonqualified common stock options to consultants at exercise prices that range from \$3.69 to \$7.57 per share for services rendered. Such options are included in the option tables disclosed above. The options generally vest over four years at a rate of 25 percent one year from the grant date and one thirty-sixth per month thereafter and expire ten years after the grant date. Total nonqualified stock-based compensation expense was \$301,000, \$662,000 and \$388,000 in 2005, 2004 and 2003, respectively. The fair value of these options was determined using the Black-Scholes model.

**Employee Stock Purchase Plan**

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

**Common Stock**

At December 31, 2005, the Company has reserved shares of common stock for future issuance as follows:

2004 Stock Option Plan	7,130,602
2000 Employee Stock Purchase Plan	<u>1,159,705</u>
	<u>8,290,307</u>

**6. Comprehensive Loss**

Comprehensive loss was as follows (in thousands):

	Year Ended December 31,		
	2005	2004	2003
Net loss	\$ (13,293)	\$ (13,818)	\$ (10,433)
Unrealized gain / (loss) on investments	29	(93)	(81)
Other than temporary loss on investments	21	71	6
Comprehensive loss	<u>\$ (13,301)</u>	<u>\$ (13,840)</u>	<u>\$ (10,508)</u>



## SANGAMO BIOSCIENCES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

**7. Income Taxes**

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

	December 31,	
	2005	2004
Deferred tax assets:		
Net operating loss carryforwards	\$ 23,003	\$ 18,363
Research and development tax credit carryforwards	3,171	2,774
Capitalized research	1,425	1,591
Other	601	1,288
	<u>28,200</u>	<u>24,016</u>
Valuation allowance	<u>(28,200)</u>	<u>(24,016)</u>
Net deferred tax assets	<u>\$ —</u>	<u>\$ —</u>

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the net deferred tax assets have been fully offset by a valuation allowance. There is no provision for income taxes because we have incurred losses. The valuation allowance increased by \$4,184 and \$7,810 for the years ended December 31, 2005 and 2004, respectively. As of December 31, 2005, Sangamo had net operating loss carryforwards for federal income tax purposes of approximately \$62.7 million, which expire in the years 2010 through 2025. The Company also has state net operating loss carryforwards of approximately \$28.3 million, which expire in the years 2006 through 2015. The Company also has federal and state research tax credit carryforwards of \$1.8 million and \$1.9 million, respectively. The federal research credits will begin to expire in the year 2018 through 2025 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.

**8. Accounts Payable and Accrued Liabilities**

Accounts payable and accrued liabilities consist of the following:

	December 31,	
	2005	2004
Accounts payable	\$ 766	\$404
Accrued professional fees	548	383
Accrued research and collaboration expense	198	65
Other	22	54
Total accounts payable and accrued liabilities	<u>\$1,534</u>	<u>\$906</u>

## SANGAMO BIOSCIENCES, INC.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

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

The following table sets forth certain unaudited quarterly financial data for the eight quarters ended December 31, 2005. The unaudited information set forth below has been prepared on the same basis as the audited information and includes all adjustments necessary to present fairly the information set forth herein. The operating results for any quarter are not indicative of results for any future period. All data is in thousands except per common share data.

	Fiscal Year 2005				Fiscal Year 2004			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Revenues <sup>(3)</sup>	\$ 311	\$ 466	\$ 440	\$ 1,267(1)	\$ 811(2)	\$ 132	\$ 172	\$ 200
Expenses	\$ 3,836	\$ 3,874	\$ 4,204	\$ 4,317	\$ 3,990	\$ 3,529	\$ 4,847	\$ 3,600
Net loss	\$(3,498)	\$(3,332)	\$(3,639)	\$(2,824)	\$(2,942)	\$(3,262)	\$(4,571)	\$(3,043)
Net loss per share	\$ (0.14)	\$ (0.13)	\$ (0.14)	\$ (0.10)	\$ (0.12)	\$ (0.13)	\$ (0.18)	\$ (0.12)

- (1) Q4 2005 revenues include approximately \$677,000 in connection with our Research License and Commercial Option Agreement with Dow AgroSciences LLC ("DAS"), a wholly owned indirect subsidiary of Dow Chemical Corporation and increased revenue of \$352,000 in connection with our Advanced Technology Program grant awarded by the National Institute of Standards and Technology.
- (2) Q1 2004 revenues include a \$600,000 milestone payment that was received upon the filing of the IND for PAD.
- (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.

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

None.

**Item 9A. Controls and Procedures**

**CONTROLS AND PROCEDURES**

We have performed an evaluation under the supervision and with the participation of our management, including our principal executive officer and principal financial officer of the effectiveness of our disclosure controls and procedures, as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the Exchange Act). Based on that evaluation, our management, including our principal executive officer and principal financial officer, concluded that our disclosure controls and procedures were effective as of December 31, 2005 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.

**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.

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

Management 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, 2005. Ernst & Young LLP, our registered public accounting firm, has audited the financial statements included in our annual report and has issued an attestation report on management's assessment of our 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 2005 that has materially affected, or is reasonably likely to materially affect, our internal controls over financial reporting.

**Item 9B. Other Information**

Not applicable.

**PART III**

Certain information required by Part III is omitted from this Report on Form 10-K since we intend to file our definitive Proxy Statement for our next Annual Meeting of Stockholders, pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended (the "2005 Proxy Statement"), no later than April 29, 2006, and certain information to be included in the Proxy Statement is incorporated herein by reference.

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

The information required by this item concerning our directors, executive officers, Section 16 compliance and code of ethics is incorporated by reference to the information set forth in the sections titled "Election of Directors," "Management," "Section 16(a) Beneficial Ownership Reporting Compliance" and "Code of Ethics" in our 2006 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 2006 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 2006 Proxy Statement.

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

The information required by this item regarding certain relationships and related transactions is incorporated by reference to the information set forth in the section titled "Certain Relationships and Related Transactions" in our 2006 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 2006 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.

(c) See the Index of Exhibits

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

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 16, 2006.

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:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ EDWARD O. LANPHIER II</u> Edward O. Lanphier II	President, Chief Executive Officer and Director (Principal Executive Officer)	March 16, 2006
<u>/s/ GREG S. ZANTE</u> Greg S. Zante	Senior Director, Finance and Administration (Principal Financial and Accounting Officer)	March 16, 2006
<u>/s/ WILLIAM G. GERBER, M.D.</u> William G. Gerber, M.D.	Director	March 16, 2006
<u>/s/ JON E. M. JACOBY</u> Jon E. M. Jacoby	Director	March 16, 2006
<u>/s/ JOHN W. LARSON</u> John W. Larson	Director	March 16, 2006
<u>/s/ MARGARET A. LIU, M.D.</u> Margaret A. Liu, M.D.	Director	March 16, 2006
<u>/s/ STEVEN J. MENTO, Ph.D</u> Steven J. Mento, Ph.D	Director	March 16, 2006
<u>/s/ MICHAEL C. WOOD</u> Michael C. Wood	Director	March 16, 2006

**Index to Exhibits**

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

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<b>Exhibit Number</b>	<b>Description of Document</b>
10.15(+)	Separation Agreement and Release between Sangamo and Carl Pabo, Ph.D., dated June 20, 2003 (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K/A filed April 27, 2004).
10.16(+)	Separation Agreement and Release between Sangamo and Janet Nibel, dated August 13, 2003 (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K/A filed April 27, 2004).
10.17(+)	Separation Agreement and Release between Sangamo and Peter Bluford, dated October 29, 2004 (incorporated by reference to Exhibit 99.1 to the Company's Form 8-K filed November 4, 2004).
10.18(+)	2004 Stock Incentive Plan (incorporated by reference to Appendix C of the Company's Definitive Proxy Statement on Schedule 14A filed April 29, 2004).
10.19	Triple Net Laboratory Lease, between Sangamo and Point Richmond R&D Associates II, LLC, dated May 23, 1997 (incorporated by reference to Sangamo's Registration Statement on Form S-1 (Reg. No. 333-30314), as amended).
10.20	First Amendment to Triple Net Laboratory Lease, between Sangamo and Point Richmond R&D Associates II, LLC, dated March 12, 2004 (incorporated by reference to Sangamo's Annual Report on Form 10-K for the year ended December 31, 2004).
10.21(+)	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).
10.22	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).
10.23††	Research and Commercial Option License Agreement, dated October 5, 2005, between Sangamo and Dow AgroSciences LLC.
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.

NOTE: Portions of this Exhibit are the subject of a Confidential Treatment Request by the Registrant to the Securities and Exchange Commission. Such portions have been redacted and are marked with a “[\*]” in place of the redacted language.

**RESEARCH AND COMMERCIAL LICENSE OPTION AGREEMENT**

**This Research and Commercial License Option Agreement** (the “Agreement”) is made and entered into as of October 1, 2005 (the “Effective Date”) by and between **Sangamo BioSciences, Inc.**, a Delaware corporation having its principal place of business at Point Richmond Tech Center, 501 Canal Boulevard, Suite A100, Richmond, California 94804 (“Sangamo”), and **Dow AgroSciences LLC**, a Delaware limited liability company having its principal place of business at 9330 Zionsville Road, Indianapolis, Indiana 46268 (“DAS”). Sangamo and DAS are sometimes referred to herein individually as a “Party” and collectively as the “Parties.”

**Recitals**

**A.** Sangamo has expertise in, and proprietary technology relating to, zinc finger proteins and their use to alter the genomes and/or protein expression capabilities of organisms and cells, including plants and plant cells.

**B.** DAS has expertise in the use of genetically modified and traditionally bred plants and plant cell cultures for agricultural and industrial purposes as well as for the production of vaccines and therapeutic products for human and/or animal health.

**C.** DAS desires an exclusive license option under Sangamo’s expertise and proprietary technology as applied to plant cells, plants, and plant cell cultures, and Sangamo desires to grant such an option, and both DAS and Sangamo desire to establish a research collaboration to validate and optimize the application of such Sangamo expertise and technology to plants, plant cells and plant cell cultures for agricultural, industrial, and vaccine and therapeutic product production purposes.

**Now, Therefore,** the Parties agree as follows:

1.

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**ARTICLE 1**  
**DEFINITIONS**

**1.1 “Affiliate”** means, with respect to a particular Party, a person, corporation, partnership, or other entity that controls, is controlled by or is under common control with such Party. For the purposes of the definition in this Section 1.1, the word “control” (including, with correlative meaning, the terms “controlled by” or “under the common control with”) means the actual power, either directly or indirectly through one or more intermediaries, to direct the management and policies of such entity, whether by the ownership of at least fifty percent (50%) of the voting stock of such entity, or by contract or otherwise.

**1.2 “Animal Health Product”** a Licensed Product that is used for diagnosis, treatment or prophylaxis of a disease or medical condition in a non-human animal, for reducing or eliminating pathogens in a non-human animal, or for nutritional supplements or food additives for nutritional enhancements in a non-human animal.

**1.3 “Annual FTE Rate”** means (a) for each year of the Initial Research Term (i.e., until the third anniversary of the Effective Date), \$\*\*\* per FTE and (b) for each year of the Subsequent Research Term, \$\*\*\* per FTE plus an additional four percent (4%), compounded annually, as a cost of living adjustment.

**1.4 “Average Net Unit Return of the Trait”** or “ANURT” shall be calculated using the following formula:

$$\text{ANURT} = \text{***}$$

wherein

R is the DAS reference price, which reference price shall in each case be equal to the Net Unit Return for a unit of the germplasm into which the applicable ZFP Trait was inserted or created. In the event the pure germplasm is not sold in sufficient volume to establish a reference

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\*\*\* Certain information on this page has been omitted and filed separately with the Commission pursuant to a request for Confidential Treatment.

price, then the Net Unit Return for the nearest competitive germplasm will be used as the reference price, and if substantially all of the competitive germplasm is marketed with a particular Other Trait (referred to hereinafter as an “embedded” Trait – an example is glyphosate tolerance in soybeans), the reference price will be for germplasm with the embedded Trait.

ANURP is the Net Unit Return price for a unit of the germplasm of the resulting Crop Product containing such ZFP Trait;

N is the number of separate and commercially distinguishable Traits (both ZFP Traits and Other Traits) in such Crop Product (excluding any embedded Trait present in the reference germplasm); and

TPTR is the royalties, if any, paid by DAS to a Third Party with respect to the ZFP Trait in such Crop Product.

**1.5 “CEO”** shall have the meaning assigned to it in Section 3.5(d).

**1.6 “Collaboration”** means all activities performed by or on behalf of Sangamo or DAS in the course of performing the activities described in, or fulfilling of their obligations pursuant to, this Agreement.

**1.7 “Confidential Information”** shall have the meaning assigned to it in Section 10.1.

**1.8 “Contract Manufacturer”** means a Third Party contractor capable of carrying out the Manufacture of ZFP Products at a quantity level and volume sufficient to supply Sangamo and DAS for their activities under this Agreement and Sublicensees in accordance with the terms of their Technology Licenses or their research licenses granted by DAS pursuant to Section 2.1(a)(ii).

**1.9 “Control”** means, with respect to an item of Information or intellectual property right, that a Party owns or has a license to such item or right and has the ability to disclose such item and/or grant a license or sublicense as provided for in this Agreement under such item or right without violating the terms of any agreement or other arrangement with any Third Party.

**1.10 “Core Patents”** means (a) the United States Sangamo Patents listed in Exhibit B; (b) any non-provisional applications, additions, continuations, continuations-in-part, divisions and substitutes thereof; and (c) any reissue, re-examination, extension or patent term extension of any such patent.

**1.11 “Crop Product”** means a Licensed Product that is a human or animal food, human or animal food ingredient, or is used to produce a human food, human food ingredient, or is a fiber. Notwithstanding the foregoing, Crop Product shall not include any Animal Health Product, Human Health Product or Industrial Product.

**1.12 “DAS Improvements”** means (a) Improvements (other than Joint Improvements) that are made by one or more employees, consultants, or independent contractors of DAS or any DAS Affiliate; and (b) Improvements made by Sublicensees pursuant to research licenses granted by DAS pursuant to Section 2.1(a)(ii), to the extent owned or controlled by DAS or any DAS Affiliate.

**1.13 “DAS Improvement Patent”** means any Improvement Patent that claims a DAS Improvement.

**1.14 “DAS Product”** means any Licensed Product arising from DAS’s or its Affiliate’s activities in the Field (a Licensed Product arising solely from a Sublicensee’s activities in the Field is not included in DAS Product).

**1.15 “DAS Program Inventions”** means (a) Program Inventions (other than Joint Program Inventions) that are made by one or more employees, consultants, or independent contractors of DAS or any DAS Affiliate, and (b) Program Inventions made by Sublicensees, to the extent owned or controlled by DAS or any DAS Affiliate.

**1.16 “DAS Program Patent”** means a Program Patent that claims a DAS Program Invention.

**1.17 “DAS ZFP Trait”** means a ZFP Trait arising from DAS’s activities in the Field.

**1.18 “Diligent Efforts”** means the carrying out of obligations or tasks in a sustained manner consistent with the efforts a Party devotes to a product or a research, development or

marketing project of similar market potential, profit potential or strategic value resulting from its own research efforts, based on conditions then prevailing. Diligent Efforts requires that the Party: (a) promptly assign responsibility for such obligations to specific employee(s) who are held accountable for progress and monitor such progress on an on-going basis, (b) set and consistently seek to achieve specific and meaningful objectives for carrying out such obligations, and (c) consistently make and implement decisions and allocate resources designed to advance progress with respect to such objectives.

**1.19 “Field”** means gene targeting and/or gene regulation using a ZFP Product to modify the genome of a plant cell, plant, or plant cell culture (in each case, whether constituting or derived from a vascular or non-vascular plant), or alter the nucleic acid or protein expression in a plant cell, plant, or plant cell culture. For the purpose of this Agreement, “non-vascular” plants shall include but not be limited to algae, moss, and fungi. Explicitly excluded from the Field are delivery of any ZFP Product into a human or animal for diagnostic, therapeutic or prophylactic purposes, and products intended to result in such delivery.

**1.20 “Field Specific Sangamo Patent”** means any Sangamo Patent in which all claims are directed to methods that are solely useful in the Field, or to compositions of matter or methods of manufacture of ZFP Products that are solely useful in the Field. Exhibit A may be amended from time to time to identify and update identification of Field Specific Sangamo Patents.

**1.21 “Food Safety Product”** means an Animal Health Product for reducing or eliminating pathogens in non-human animals that may be used to produce human food.

**1.22 “FTE”** means the equivalent of one employee or consultant of Sangamo working full time for one twelve (12) month period.

**1.23 “Full-scale Product Launch”** means commercial offering of a product for an entire national market or for an entire targeted market geography, as opposed to test marketing.

**1.24 “Generally Applicable Sangamo Patents”** means all Sangamo Patents (other than Field Specific Sangamo Patents) that claim compositions of matter or methods that are reasonably necessary or useful in the Field. Exhibit A may be amended from time to time to

identify and update identification of Generally Applicable Sangamo Patents.

**1.25 “GMO Product”** means any Crop Product that is a DAS Product and is not a Non-GMO Product.

**1.26 “Human Health Product”** means any Licensed Product (a) that is intended for the diagnosis, treatment or prophylaxis of a disease or medical condition in a human or (b) that is extracted from plant material and intended to be ingested by or topically applied or otherwise delivered or administered to humans, food, and food ingredients (e.g. oils), including without limitation nutraceuticals, vitamins, nutritional supplements, food additives, shampoo, soap, sunscreen, and cosmetics.

**1.27 “Improvement”** means any enhancement, modification, or improvement to the Sangamo Technology, whether patentable or not, made during the term of the Agreement by one or more employees, consultants, or independent contractors of DAS, a DAS Affiliate, or a Sublicensee, but excluding any Product Specific Invention. A “Joint Improvement” is an Improvement made by one or more employees, consultants, or independent contractors of both Parties.

**1.28 “Improvement Patent”** means any patent or patent application in the United States or any foreign jurisdiction claiming an Improvement.

**1.29 “Industrial Product”** means a Licensed Product that is (a) a raw material for construction, textiles, or industrial applications (e.g. biomaterials, biofeedstocks, alternative raw materials), (b) a plant or plant part that produces or is used as a product described in (a), or (c) germplasm, seeds or other plant-derived material capable of propagating a plant described in (b). Notwithstanding the foregoing, Industrial Product shall not include any Animal Health Product or Human Health Product.

**1.30 “Information”** means information, results and data of any type whatsoever, in any tangible or intangible form whatsoever, including without limitation, databases, inventions, practices, methods, techniques, specifications, formulations, formulae, knowledge, know-how, skill, experience, test data including pharmacological, biological, chemical, biochemical, toxicological and clinical test data, analytical and quality control data, stability data, studies and

procedures, and patent and other legal information or descriptions.

**1.31 “Infringement”** shall have the meaning set forth in Section 9.6(a).

**1.32 “Initial Research Term”** means the period of time commencing on the Effective Date and continuing, unless the Agreement is earlier terminated pursuant to Article 11, until the third anniversary of the Effective Date.

**1.33 “Joint Inventions”** means inventions, whether patentable or not, that are made by one or more employees, consultants, or independent contractors of both Parties. Joint Program Inventions are Joint Inventions that are Program Inventions. For clarity, Joint Inventions shall include Joint Improvements, but shall exclude jointly made Product Specific Inventions.

**1.34 “Joint Patent”** means a patent or patent application that claims a Joint Invention. “Joint Program Patent” means a Joint Patent that claims a Joint Program Invention. “Joint Improvement Patent” means a Joint Patent that claims a Joint Improvement.

**1.35 “Joint Research Team”** or “JRT” means the committee described in Sections 3.4 and 3.6.

**1.36 “Joint Steering Committee”** or “JSC” means the committee described in Sections 3.4 and 3.5.

**1.37 “Licensed Product”** means any product, other than a ZFP Product, that is created or produced directly or indirectly through use of Sangamo Technology in the Field by DAS or its Affiliates or its Sublicensees. For clarity it is reiterated that the Field explicitly excludes products intended to deliver into a human or an animal any ZFP Product for diagnostic, therapeutic or prophylactic purposes; therefore Licensed Product also excludes such products.

**1.38 “Licensing Program”** means the program under which DAS grants Technology Licenses to Sublicensees, as described in more detail in Article 5.

**1.39 “Major Crop”** means one of the following six crops: corn, cotton, canola oil/oil seed rape, rice, wheat, and soybean.

**1.40 “Manufacture” or “Manufacturing”** means the design, optimization, construction, production, and testing of ZFP Product.

**1.41 “Minimum Annual Payment”** means each payment described in Section 8.7.

**1.42 “Net Average Trait Value”** means the Average Net Unit Return of the Trait multiplied by the net volume sold of the applicable DAS Product.

**1.43 “Net Sales”** means the amount invoiced or otherwise billed by DAS or its Affiliate or sublicensee for sales or other commercial disposition of a DAS Product to a Third Party purchaser, less the following to the extent included in such billing or otherwise actually allowed or incurred with respect to such sales: (i) discounts, including cash, trade and quantity discounts, price reduction programs, retroactive price adjustments with respect to sales of a product, charge-back payments and rebates granted to trade customers; (ii) credits or allowances actually granted upon rejections or returns of DAS Products, including for replants, recalls or damaged goods; (iii) freight, postage, shipping and insurance charges actually allowed or paid for delivery of DAS Products, to the extent billed; (iv) customs duties, surcharges and other governmental charges incurred in connection with the exportation or importation of a DAS Product; (v) bad debts relating to sales of DAS Products that are actually written off by the seller in accordance with generally accepted accounting principles, consistently applied, during the applicable royalty calculation period; and (vi) taxes, duties or other governmental charges levied on, absorbed or otherwise imposed on sale of DAS Products, including without limitation value-added taxes, or other governmental charges otherwise measured by the billing amount, when included in billing, as adjusted for rebates and refunds, but specifically excluding taxes based on net income of the seller; provided that all of the foregoing deductions are calculated in accordance with generally accepted accounting principles consistently applied throughout the selling party’s organization.

Notwithstanding the foregoing, if any DAS Product is sold under a bundled or capitated arrangement with other products, then, solely for the purpose of calculating Net Sales for royalty purposes hereunder, any discount on such DAS Products sold under such an arrangement shall be no greater, on a percentage basis based on the gross selling price prior to discount, than the largest percentage discount applied on any other product sold within such bundled arrangement

for the applicable accounting period. In case of any dispute as to the applicable discount numbers under the preceding sentence, the determination of same shall be calculated and certified by the selling party's independent public accountants, whose decision shall be binding.

For sake of clarity and avoidance of doubt, sales by DAS, its Affiliates or sublicensees of a DAS Product to a Third Party distributor of such DAS Product in a given country shall be considered a sale to a Third Party customer.

**1.44 "Net Unit Return"** means Net Sales divided by the net number of units sold.

**1.45 "Non-GMO Designation"** means that consultation with relevant regulatory authorities in the United States, European Union, Japan, and Canada has confirmed that Regulatory Approval for a particular Crop Product is not required in any of them.

**1.46 "Non-GMO Product"** means a Crop Product that is a DAS Product and for which the criteria of Non-GMO Designation have been satisfied.

**1.47 "Option Exercise Notice"** means DAS's notice pursuant to Section 2.2.

**1.48 "Option Period"** means the period commencing on the Effective Date of this Agreement and ending on Sangamo's timely receipt of the Option Exercise Notice and the option fee set forth in Section 8.6.

**1.49 "Other Trait"** means a Trait that is introduced, enhanced, modified, deleted or otherwise altered through methods that do not involve the use of ZFP Products.

**1.50 "Product Specific Invention"** means an invention, whether patentable or not, that (a) is made by (i) Sangamo in carrying out the Research Program or Manufacturing ZFP Products for DAS or Sublicensees pursuant to Section 7.1 or (ii) DAS or its Affiliates or Sublicensees under this Agreement and (b) is specific to (i) a ZFP Product that is directed to a particular DNA sequence in a plant and solely useful for modifying the sequence or expression of a gene in such plant related to such DNA sequence, or (ii) the modified form of such DNA sequence (or the modified protein encoded by such modified DNA sequence) as found in the resulting Licensed Product.



**1.51 “Program Inventions”** means inventions, other than Improvements and Product Specific Inventions, that are (a) made by the Parties (or any Affiliates or Third Parties conducting Research Program activities on behalf of a Party) in carrying out the Research Program, (b) otherwise arising from DAS’s activities in the Field during the Option Period, or (c) made by Sublicensees during the Option Period pursuant to research licenses granted by DAS pursuant to Section 2.1(a)(ii).

**1.52 “Program Patent”** means any patent or patent application in the United States or any foreign jurisdiction that claims a Program Invention.

**1.53 “Regulatory Approval”** means any and all approvals (including supplements, amendments, pre- and post-approvals, pricing and reimbursement approvals), licenses, registrations or authorizations of any national, supra-national (e.g., the European Commission or the Council of the European Union), regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity, that are necessary for the manufacture, distribution, use or sale of a DAS Product in a regulatory jurisdiction, as well as applicable import approvals in Japan and Canada. Regulatory Approval does not include a confirmation by a regulatory agency that its approval is not required.

**1.54 “Research Budget”** means the written budget prepared by Sangamo and presented to the JSC for approval outlining a good faith approximation of FTE expenditures and all other costs and expenses that Sangamo expects to incur in carrying out the tasks assigned to it under the Research Plan.

**1.55 “Research Plan”** means the written description of the overall program for the conduct of the Research Program, including an allocation of responsibilities between the Parties for implementation, as amended or revised from time to time by the JSC pursuant to Section 4.2. A preliminary Research Plan for the Initial Research Term has been agreed upon by the Parties in a separate side letter. The Research Plan shall include the Research Budget.

**1.56 “Research Program”** means the collaborative research program undertaken by the Parties to validate and optimize the application of the Sangamo Technology to the Field.

**1.57 “Research Term”** means the Initial Research Term plus the Subsequent Research

Term.

**1.58 “Sangamo Know-How”** means all Information (other than Sangamo Patents) that (a) is Controlled, during the term of this Agreement, by Sangamo or by any entity that is a Sangamo Affiliate during the Research Term and (b) is reasonably necessary or useful in the Field; including any Sangamo Program Invention. Sangamo Know-How shall not include any Information licensed to Sangamo or a Sangamo Affiliate by a Third Party unless such Information is licensed pursuant to a Third Party License and meets the aforementioned criteria for Sangamo Know-How.

**1.59 “Sangamo Patent”** means (a) any patent or patent application Controlled, during the term of this Agreement, by Sangamo or by any entity that is a Sangamo Affiliate during the Research Term, in the United States or any foreign jurisdiction, that is reasonably necessary or useful in the Field or otherwise claims the composition of matter, manufacture, or use of ZFP Products; (b) any non-provisional application, addition, continuation, continuation-in-part or division thereof or any substitute application therefor; (c) any patents issuing on any of the foregoing; (d) any reissue, re-examination, extension or patent term extension of any such patent, and any confirmation patent or registration patent or patent of addition based on any such patent; and (e) any foreign equivalent of the foregoing; including any Sangamo Program Patent. A patent or patent application licensed to Sangamo or a Sangamo Affiliate by a Third Party shall not be a Sangamo Patent unless such patent or patent application is licensed pursuant to a Third Party License and meets the aforementioned criteria for a Sangamo Patent. Sangamo Patents identified as of the Effective Date are listed in Exhibit A, which may be updated by Sangamo from time to time. Sangamo Patents do not include DAS Improvement Patents, DAS Program Patents, or any patents on Improvements made by Sublicensees. In Exhibit A, each Sangamo Patent may be designated as a Field Specific Sangamo Patent or Generally Applicable Sangamo Patent as mutually agreed upon by the Parties.

**1.60 “Sangamo Program Inventions”** means Program Inventions (other than Joint Program Inventions) that are made by one or more employees, consultants, or independent contractors of Sangamo or its Affiliates.

**1.61 “Sangamo Program Patent”** means any Program Patent that claims a Sangamo

Program Invention.

**1.62 “Sangamo Technology”** means the Sangamo Patents and the Sangamo Know-How.

**1.63 “Stacking Crop Product”** means a Crop Product that (a) is a DAS Product, (b) is the direct or indirect result of using one or more ZFP Products to produce a plant or plant cell comprising Traits, where these Traits were each available in separate plants or plant cells that could have been crossed to produce a breeding stack of the two Traits, and (c) is not the result of any other activity in the Field.

**1.64 “Sublicensee”** means a Third Party that has entered into a Technology License or received a research license granted by DAS pursuant to Section 2.1(a)(ii).

**1.65 “Sublicensing Revenues”** means any cash consideration that DAS receives from a Sublicensee in connection with a Technology License, which may include (without limitation) upfront license fees, annual license or maintenance payments, milestone payments, royalties, credits against DAS’ future expenses, or reductions in royalties or other payments otherwise owed to the Sublicensee. Sublicensing Revenue also includes all cash consideration received by DAS in connection with any research license it grants pursuant to Section 2.1(a)(ii). Sublicensing Revenue does not include the value of non-cash consideration received by DAS, the Parties having expressly agreed that DAS is not obligated to account to Sangamo for such consideration.

**1.66 “Subsequent Research Term”** means the period of time commencing on the expiration of the Initial Research Term and continuing until it is terminated in accordance with Section 4.1 or the Agreement is terminated pursuant to Article 11, whichever is first.

**1.67 “Technology License”** means an executed and in-force written agreement between DAS and a Third Party, wherein such Third Party obtains a license under the Sangamo Technology to use ZFP Products in the Field for the sole purpose of generating Licensed Products and to use, make, have made, import, sell, and offer for sale such Licensed Products. Technology License does not include a Trait license granted by DAS to a Third Party to commercialize a DAS Trait pursuant to Section 6.2, and does not include research licenses

granted by DAS pursuant to Section 2.1(a)(ii).

**1.68 “Third Party”** means any entity other than (i) Sangamo, (ii) DAS or (iii) an Affiliate of either Party.

**1.69 “Third Party License”** shall mean (a) any of the agreements set forth in Exhibit C and (b) any agreement that is deemed to be a Third Party License in accordance with the terms of Section 2.6(b).

**1.70 “Trait”** means a distinguishing characteristic or quality of an organism resulting from (a) modified expression of existing genes in the organism, (b) modification of the coding sequence of an existing gene in the organism, or (c) insertion of DNA sequences from a different source.

**1.71 “Trait Crop Product”** means a Crop Product that is a DAS Product but is not a Stacking Trait Product.

**1.72 “ZFP Product”** means a zinc-finger protein (including a zinc-finger transcription factor or a zinc-finger nuclease), or a nucleic acid encoding and capable of expressing such protein in a cell or tissue.

**1.73 “ZFP Trait”** means a Trait that is introduced, enhanced, modified, deleted or otherwise altered through activities in the Field.

## ARTICLE 2

### LICENSES

#### 2.1 Licenses to DAS

**(a) Grants to DAS Effective upon Signing.** Subject to the terms and conditions of this Agreement, Sangamo hereby grants to DAS and its Affiliates the following licenses and rights under Sangamo Technology:

(i) a world-wide, co-exclusive (with Sangamo) research license under Sangamo Technology to use ZFP Products in the Field for research purposes and to make and test Licensed Products for research purposes;

(ii) the exclusive right to grant research licenses to Third Parties to use ZFP Products in the Field for research purposes and to make and test Licensed Products for research purposes; and

(iii) the exclusive right to grant to Sublicensees a license (A) to use ZFP Products in the Field for the sole purpose of generating Licensed Products and (B) to use, make, offer to sell, sell, and import such Licensed Products, all pursuant to Technology Licenses.

**(b) Additional Grants to DAS Effective after Exercise of Option.** Subject to the terms and conditions of this Agreement, Sangamo hereby grants to DAS and its Affiliates, effective upon DAS's exercise of the Option (which exercise shall include timely provision of the Option Exercise Notice and timely payment of the fee set forth in Section 8.6), the following additional licenses and rights under Sangamo Technology:

(i) a royalty bearing, world-wide, exclusive license to make, use, and import ZFP Products for use in the Field, which DAS shall exercise for the sole purposes of

(1) generating DAS Products; or

(2) offering for sale and selling ZFP Products at cost to Sublicensees for use in the Field for the sole purpose of generating Licensed Products;

provided, however, that with respect to the Manufacture of ZFP Products for use in the Field, such license is co-exclusive with Sangamo and any Contract Manufacturer, DAS shall not exercise such license until Sangamo has transferred its Manufacturing technology to DAS pursuant to Section 7.2, and Sangamo shall only use its coexclusive rights in the Field with respect to Manufacture of ZFP Products to fulfill its obligations under Section 7.1; and

(ii) a royalty bearing, world-wide, exclusive license to make, use, sell, offer for sale, and import DAS Products.

**(c) Sublicensing.** DAS shall not have the right to sublicense its right to grant research licenses and Technology Licenses under Section 2.1(a) nor sublicense its rights under Section 2.1(b)(i), other than to a Contract Manufacturer selected by DAS and approved by Sangamo for the sole purpose of Manufacturing ZFP products in accordance with the terms of this Agreement. The license set forth in Section 2.1(b)(ii) shall be freely sublicensable. Sublicensees may be given the right to further sublicense Licensed Products that they develop under Technology Licenses, and Sublicensees may be given the right to license Third Parties to make, use, offer to sell, sell, or import products containing ZFP Traits that the Sublicensees develop under Technology Licenses (i.e., license their Traits), provided that licenses do not grant any sublicenses under or rights with respect to Sangamo Technology.

**(d) Non-exclusive rights for Animal Health Products and Human Health Products.** Notwithstanding anything to the contrary in this Agreement, each of the licenses and rights granted in 2.1(a) and 2.1(b) shall be non-exclusive with respect to Animal Health Products and Human Health Products.

**2.2 Option Period.** The Parties acknowledge and agree that the Research Program is intended to provide DAS with an opportunity to evaluate the Sangamo Technology and the utility of ZFP Products in the Field for the generation of Licensed Products and to determine whether DAS intends to exercise the Option. Accordingly, unless DAS notifies Sangamo in writing on or before the third anniversary of the Effective Date, that DAS desires to generate, develop and commercialize DAS Products (such notice, the "Option Exercise Notice") and timely pays the fee set forth in Section 8.6, this Agreement (including without limitation the licenses set forth in Section 2.1) shall terminate in accordance with Section 11.3. DAS hereby covenants that DAS and its Affiliates will not practice the licenses set forth in Section 2.1(b) during the Option Period.

### **2.3 Licenses to Sangamo.**

**(a) Manufacturing License.** Subject to the terms and conditions of this Agreement, DAS hereby grants to Sangamo and its Affiliates a worldwide, fully paid, license under the Improvements, DAS Program Inventions, and Joint Program Inventions (and any patents or patent applications claiming the same) solely to Manufacture ZFP Products for use in

the Field by DAS or its Sublicensees. Such license shall be sublicensable solely to a Contract Manufacturer.

**(b) Licenses under Improvements and Program Inventions.** Subject to the terms and conditions of this Agreement, DAS hereby grants to Sangamo and its Affiliates a worldwide, fully paid, perpetual, irrevocable (except pursuant to Section 11.2(e)), exclusive license (with the right to sublicense) to practice the DAS Improvements, Joint Improvements, DAS Program Inventions, and Joint Program Inventions (and all patents and patent applications claiming the same) for all purposes outside the Field.

#### **2.4 Sangamo Retained Rights.**

**(a)** Notwithstanding anything to the contrary in this Agreement, Sangamo shall retain the exclusive right to make and use ZFP Products for uses outside the Field.

**(b)** Sangamo retains the right to use Sangamo Technology in yeast and to grant Third Parties the right to use Sangamo Technology in yeast. (It is intended that DAS has a non-exclusive right to use Sangamo Technology in yeast in accordance with Section 2.1.)

#### **2.5 Negative Covenants.**

**(a)** DAS hereby covenants that it shall not use or practice, nor shall it cause or permit any of its Affiliates or sublicensees (including Sublicensees) to use or practice, directly or indirectly, any Sangamo Technology for any other purposes other than those expressly permitted by this Agreement.

**(b)** Sangamo hereby covenants that it shall not use or practice, nor shall it cause or permit any of its any Affiliates or sublicensees to, use or practice, directly or indirectly, any DAS Improvement, DAS Program Invention, or Product Specific Invention for any other purposes other than those expressly permitted by this Agreement.

#### **2.6 Third Party Licenses.**

**(a)** The licenses granted to DAS in Section 2.1 include sublicenses under Sangamo Technology licensed to Sangamo pursuant to Third Party Licenses. Such sublicenses

are subject to (i) the limitations set forth in the Third Party Licenses (including without limitation any limitations on the scope and exclusivity of the licenses granted to Sangamo thereunder and any constraints on Sangamo's ability to prosecute or enforce Sangamo Patents licensed pursuant to such Third Party Licenses) and (ii) DAS's satisfaction of the non-financial terms and conditions of the Third Party Licenses, including without limitation those terms set forth on Exhibit D. DAS understands and acknowledges that (1) the Collaborative Agreement between Gendaq Limited and \*\*\* dated \*\*\* (the "\*\*\*\* Agreement") is not a Third Party License, (2) the licenses granted to DAS under Section 2.1 do not include sublicenses of any licenses received by Sangamo under the \*\*\* Agreement as a result of Sangamo's acquisition of Gendaq Limited, and (3) with respect to any patents or patent applications included within the Sangamo Patents that are addressed in the \*\*\* Agreement, the licenses granted to DAS in Section 2.1 to such patents and patent applications are only licenses under Sangamo's ownership interest in such patents and patent applications. DAS further understands and acknowledges that, notwithstanding the fact that the Patent License Agreement between \*\*\* and Sangamo dated \*\*\*, as amended, (the "\*\*\*\* Agreement") is a Third Party License, (A) the licenses granted to DAS under Section 2.1 do not include sublicenses under the patents and patent applications licensed to Sangamo pursuant to the Fifth Amendment to the \*\*\* Agreement (such amendment being dated \*\*\*) and (B) such patents and patent applications are not Sangamo Patents.

**(b)** The licenses granted to DAS in Section 2.1 shall only be expanded to include sublicenses under intellectual property licensed to Sangamo by a Third Party after the Effective Date (and the license agreement under which such intellectual property is licensed to Sangamo shall only be deemed to be a Third Party License) if:

**(i)** such intellectual property is reasonably necessary or useful in the Field and Sangamo's license thereto includes the Field;

**(ii)** Sangamo discloses the substantive terms of such agreement to DAS for review a reasonable amount of time in advance of Sangamo's anticipated entry into such a license agreement (which Sangamo hereby covenants to do); and

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\*\*\* Certain information on this page has been omitted and filed separately with the Commission pursuant to a request for Confidential Treatment.



(iii) DAS provides Sangamo with written notice, prior to Sangamo's entry into such license agreement, in which (1) DAS consents to adding such license agreement to the definition of Third Party License, (2) DAS assumes the obligations set forth in Section 8.11(b) with respect to such license agreement as well as all other obligations of such license agreement that are applicable to sublicensees thereunder, and (3) DAS acknowledges in writing that its sublicense under such license agreement is subject to the terms and conditions of such license agreement.

(c) DAS hereby covenants (unless it receives prior written consent from Sangamo, which Sangamo shall not unreasonably withhold) that it shall not itself directly license from Third Parties any intellectual property relating to ZFP Products without first notifying Sangamo in writing of such Third Party intellectual property and providing Sangamo with a reasonable opportunity to obtain a license from such Third Party.

### ARTICLE 3

#### OVERVIEW AND MANAGEMENT OF THE COLLABORATION

**3.1 Overview of the Collaboration.** Sangamo and DAS will conduct a Research Collaboration pursuant to the terms and conditions set forth in this Agreement. They will also cooperate in carrying out the Licensing Program. During the Option Period, DAS may conduct research under its research license apart from the Research Program, provided DAS shall disclose to Sangamo the general subject matter (but not necessarily the specific targets) of all such research, and shall disclose to Sangamo any Improvements or Program Inventions arising from such research.

**3.2 Research Program.** The goal of the Research Program will be to validate and optimize the Sangamo Technology for use in the Field and enable DAS to determine whether it wishes to exercise the Option.

**3.3 Licensing Program.** To the extent that DAS in its discretion decides to pursue the Licensing Program, the Parties will cooperate to supply ZFP Products to Sublicensees.

**3.4 Overall Management Structure.** The management of the Collaboration shall be

vested in a Joint Steering Committee (the “JSC”) and Joint Research Team (the “JRT”), with responsibilities, as further discussed in Sections 3.5 and 3.6, respectively.

### **3.5 Joint Steering Committee.**

**(a) Membership.** The JSC shall be composed of at least four (4) members, two (2) members appointed by each Party. The JSC will consist of senior members from each Party authorized to make decisions with respect to matters including, but not limited to, setting research goals, determining program expansions, determining the criteria for the special research milestone payments and when such criteria are met, resolving disputes, and making strategic decisions. Promptly following the Effective Date, each Party shall appoint its initial representative to the JSC. Each Party may replace its JSC representatives at any time upon written notice to the other Party. DAS will designate one of its representatives as the Chairperson of the JSC. The Chairperson shall be responsible for scheduling meetings, preparing and circulating an agenda in advance of each meeting, preparing and issuing minutes of each meeting within thirty (30) days thereafter, revising such minutes to reflect timely comments thereon, and overseeing the ratification of such revised minutes.

**(b) Meetings.** During the Research Term, the JSC shall meet a minimum of one (1) time every six (6) months. After the Research Term has expired, the JSC shall meet at the request of either Party, which request may be made by each Party not more than once in each six (6) month period following the end of the Research Term, unless otherwise agreed to by unanimous consent of all members of the JSC. The Parties shall endeavor to schedule meetings of the JSC at least six (6) months in advance. Meetings for the JSC shall be held on an alternating basis in Richmond, California (or such other location in the continental United States as may be chosen by Sangamo) and Indianapolis, Indiana (or such other location in the continental United States as may be chosen by DAS). With the consent of the representatives of each Party serving on a particular committee, other representatives of each Party may attend meetings of that committee as non-voting observers. A meeting of the JSC or a subordinate committee may be held by audio or video teleconference with the consent of each Party, provided that at least half of all meetings for that committee in each calendar year shall be held in person. Meetings of the JSC or a subordinate committee shall be effective only if at least one

representative of each Party is present or participating. Each Party shall be responsible for all of its own expenses of participating in the committee meetings.

**(c) Responsibilities.** The JSC shall:

**(i)** Manage and direct the implementation of the Agreement with the assistance of the Joint Research Team as described in Section 3.6;

**(ii)** Establish the strategic direction of the Research Program;

**(iii)** Oversee and direct the planning and execution of the Research Plan;

**(iv)** Evaluate the progress of the Research Program;

**(v)** Determine the completion of milestones set forth in Sections 8.4 and 8.5;

**(vi)** Review, comment upon and approve any amendments or modifications to the Research Plan (including, if applicable, the Research Budget) within thirty (30) days of receipt;

**(vii)** Have authority to establish one or more other committees that report to the JSC and assist the JSC in managing and directing the Research Program. Any committees formed beyond the JSC shall be subordinate to the JSC, shall have such membership and responsibilities as the JSC shall determine, and may be disbanded by the JSC at any time. Each Party shall use good faith and cooperative efforts to facilitate and assist the efforts of the JSC and all additional committees established by the JSC. For clarity, the JSC does not have any authority beyond the specific matters set forth in this Agreement, and cannot in any way amend or modify the terms or provisions of this Agreement;

**(viii)** Resolve, or attempt to resolve any disputes not resolved by the Joint Research Team or any other subordinate committees created by the JSC;

**(ix)** Perform such other functions as appropriate to further the purposes

of this Agreement and as allocated to it in writing by the Parties; and

(x) Critically review the results of the Research Program during the first half of the eighth calendar quarter of the Initial Research Term, to make a finding whether or not the results have been so disappointing, based for example on consistent failure to achieve the research milestones set forth in the Research Plan, that exercise of the Option by DAS is highly unlikely.

(d) **Decision Making; Authority.** The JSC shall make its decisions by consensus, with each Party's representatives collectively having one vote. If the JSC is unable to reach consensus regarding a matter before it, the issue shall be presented by the JSC to the Chief Executive Officer of each Party (or his or her designee) ("CEO") for resolution. Once an issue has been presented to the CEOs, the CEOs shall have fifteen (15) days to make a final determination regarding the issue in dispute. In the event that the CEOs are unable to reach a final determination within such fifteen (15) day period, then the Parties shall present the issue to a single arbitrator under the rules of the American Arbitration Association applicable to expedited arbitrations. For clarity, the foregoing shall only apply to issues remaining unresolved by the JSC pursuant to this Section 3.5(d) and shall not apply to any other dispute arising out of or relating to this Agreement (including without limitation any disputes regarding a Party's alleged breach of this Agreement), which shall instead be resolved pursuant to Section 8.17, 12.6(d) or 14.1. The JSC does not have any authority beyond the specific matters set forth in this Agreement, and cannot in any way amend or modify the terms or provisions of this Agreement.

### 3.6 Joint Research Team

(a) **Membership.** The Joint Research Team (JRT) shall consist of at least two (2) representatives from each Party, with at least one (1) representative from each Party being a scientist responsible in their respective organizations for day-to-day management of the Research Program. No more than one (1) member from each Party shall be a member of both the JSC and the JRT.

(b) **Responsibilities.** The JRT shall report to and be subordinate to the JSC. The JRT will manage implementation of the Research Program, review results of the Research

Program, and suggest changes in the Research Plan or the Research Budget to the JSC when such changes appear to be advisable to achieve the goals of the Research Program. Upon expiration of the Research Term, the JSC may dissolve the JRT.

**(c) Meetings.** The JRT shall meet at least quarterly, and on a monthly basis shall confer by telephone conference or video conference, or both, during the Research Term. Each Party shall have (1) vote. Disputes shall be referred to the JSC, and if they cannot be resolved at that level, will be resolved in accordance with the procedure described in Section 3.5(d).

### **3.7 Collaboration Guidelines.**

**(a) General.** In all matters related to implementation of the Agreement, the Parties shall be guided by standards of reasonableness in economic terms and fairness to each of the Parties, striving to balance the legitimate interests and concerns of the Parties and further the Research Program.

**(b) Independence.** Subject to the terms of this Agreement, the activities and resources of each Party shall be managed by such Party, acting independently and in its individual capacity. The relationship between Sangamo and DAS is that of independent contractors and neither Party shall have the power to bind or obligate the other Party in any manner, other than as is expressly set forth in this Agreement.

## **ARTICLE 4**

### **RESEARCH PROGRAM**

**4.1 Research Term.** The Research Program shall be conducted solely during the Research Term. Each Party's obligations under the Research Plan and DAS's research funding commitments set forth in Section 8.3 shall remain in force during the Research Term and shall terminate at the end of the Research Term. The Subsequent Research Term shall end when the Parties agree in writing to terminate it or are not able to agree upon additional work to be

performed under the Research Plan.

**4.2 Research Plan.** The Parties have agreed upon an initial Research Plan, which is set forth in a separate side letter. Within one hundred and twenty (120) days following the Effective Date, the JSC shall update and finalize a new version of the Research Plan, which will include a full description of the events calling for special research milestone payments required by Section 8.4. During the Research Term, the JSC shall review the Research Plan at least semiannually and may generate revised versions of the Research Plan that are consistent with the terms of this Agreement and the goals of the Collaboration. Significant changes in the scope or direction of the work and, any funding requirements exceeding one hundred fifteen percent (115%) of the Research Budget must be approved by the JSC. Without such approval, the most recently approved Research Plan shall remain in effect. Once approved by the JSC, such revised Research Plan shall replace the prior Research Plan. The Research Plan shall allocate between the Parties responsibility for each of the Research Program activities described therein in a manner consistent with this Agreement. It is anticipated that Sangamo shall be primarily responsible for the Manufacture of ZFP Products, and that DAS shall be primarily responsible for the implementation of the use of ZFP Products in plants.

**4.3 Use of Subcontractors.** Either Party may subcontract portions of the activities allocated to it under the Research Plan to any of its Affiliates, or to a Third Party, provided that such Third Party receives the prior approval of the JSC. Notwithstanding the foregoing, the JSC may expressly waive this requirement with respect to the subcontracting of certain Research Program activities that both Parties agree should be within the sole discretion of a Party.

**4.4 Reports to JSC.** At each meeting of the JSC during the Research Term and the six-month period following the end of the Research Term, each Party shall submit to the JSC a written progress report summarizing the work performed under the Research Plan since the last meeting.

**4.5 Conduct of Research Program.** The Parties shall use Diligent Efforts to conduct their respective tasks assigned pursuant to the Research Plan and to attempt to achieve the objectives of the Research Program efficiently and expeditiously. Each Party shall conduct its portion of the Research Program in good scientific manner, and in compliance in all material

respects with the requirements of applicable laws, rules and regulations and all applicable good laboratory practices.

**4.6 Research Funding.** DAS shall be solely responsible for supporting the costs of its own efforts under the Research Plan, including but not limited to all costs and expenses associated with DAS personnel. DAS shall support Sangamo's efforts under the Research Plan in the ways described in Section 8.3.

## ARTICLE 5

### LICENSING PROGRAM

**5.1 General.** DAS shall have the right, but not the obligation for marketing ZFP Products to Third Parties for use in the Field and for negotiating Technology Licenses with such Third Parties, all of which shall be carried out at DAS's sole expense. DAS shall keep Sangamo reasonably informed regarding all Technology License negotiations. DAS shall provide Sangamo with a copy of each executed Technology License within thirty (30) days after execution. DAS shall also provide Sangamo with copies of research licenses that it grants pursuant to Section 2.1(a)(ii) within thirty (30) days after execution. With respect to any Technology License or research license that includes a sublicense under a Third Party License that requires Sangamo to provide to the applicable Third Party licensor a copy of any Technology License or research license or a summary of the terms of such Technology License or research license, Sangamo shall be permitted to provide such Third Party licensor with such copy or summary.

**5.2 Technology Licenses.** DAS shall ensure that all Technology Licenses comply with the following requirements:

(a) No Technology License shall obligate (or purport to obligate) Sangamo, without Sangamo's express prior written consent, to any obligation other than Manufacture of ZFP Products under the terms and conditions set forth in Article 7.

(b) Each Technology License granted during the Option Period shall require the relevant Sublicensee to pay milestones and royalties to DAS that are no less than DAS's

milestone and royalty obligations to Sangamo, as set forth in Sections 8.9 and 8.10, for the corresponding products arising from such Sublicensee's activities in the Field.

(c) Each Technology License shall include provisions permitting DAS, upon termination of this Agreement, to assign its rights and obligations to Sangamo (or, in the case of Manufacturing obligations, a Contract Manufacturer, as the case may be) in a manner consistent with the relevant sections of Article 11.

(d) Each Technology License shall require the relevant Sublicensee to:

(i) disclose in a timely fashion to DAS any Improvement(s) made, conceived, or reduced to practice by the such Sublicensee in its activities under the Technology License; and

(ii) grant to Sangamo a fully paid, world-wide, irrevocable license under any such Improvements that is exclusive for uses outside the Field and is fully sublicensable.

(e) Each Technology License shall identify Sangamo as a third party beneficiary with respect to the license set forth in Section 5.2(d)(ii).

(f) Each Technology License shall require that the relevant Sublicensee (i) assume the obligations set forth in Section 8.11(c) and Exhibit D (as if such Sublicensee were DAS) with respect to each Third Party License sublicensed thereunder, and (ii) acknowledge that the Technology License is subject to the terms and conditions of each such Third Party License.

**5.3 DAS Discretion.** In recognition of DAS's Minimum Annual Payment obligation pursuant to Section 8.7, the Parties agree that:

(a) DAS has no obligation to seek Sublicensees, and

(b) following payment of the Option Fee specified in Section 8.6, DAS will have the right to enter into Technology Licenses and grant research licenses pursuant to Section 2.1(a)(ii), each on terms that it chooses, subject to the requirements of Sections 5.2 and 5.4, respectively; and will have no obligation to account to Sangamo for non-cash compensation



received from Sublicensees pursuant to Technology Licenses or research licenses pursuant to Section 2.1(a)(ii).

**5.4 Research Licenses.** DAS shall ensure that all research licenses it grants pursuant to Section 2.1(a)(ii) comply with the following requirements:

(a) ownership of any ZFP Product supplied to the Sublicensee shall remain in DAS (as between DAS and such Sublicensee) and the ZFP Product will be treated as confidential by such Sublicensee;

(b) the Sublicensee will not transfer any ZFP Product to any other person or entity without prior written approval of DAS and without such other person or entity entering into a material transfer agreement with DAS that contains substantially similar terms to those in the research license with such Sublicensee (and such material transfer agreement shall be considered a research license granted by DAS pursuant to Section 2.1(a)(ii));

(c) the Sublicensee's use of any ZFP Product supplied to it will be limited strictly to evaluation purposes in the Field;

(d) commercialization of any products resulting from use of ZFP Products will be prohibited in the absence of a Technology License;

(e) Each Research License shall require the relevant Sublicensee to:

(i) disclose in a timely fashion to DAS all Improvement(s) and Program Inventions made, conceived, or reduced to practice by the such Sublicensee in its activities under the Research License to permit consideration of patent strategy by DAS and Sangamo;

(ii) with respect to any Sublicensee that is an academic or not-for-profit institution, grant to Sangamo a fully paid, world-wide, irrevocable non-exclusive license under any such Improvements and Program Inventions for uses outside the Field that is fully sublicensable, with an exclusive option to negotiate an exclusive commercial license for uses outside the Field; and

(iii) with respect to any Sublicensee that is not an academic or not-for-profit institution, grant to Sangamo a fully paid, world-wide, irrevocable exclusive license under any such Improvements and Program Inventions for uses outside the Field that is fully sublicensable;

(f) Each Research License shall identify Sangamo as a third party beneficiary with respect to the licenses set forth in Sections 5.3(e)(ii) and 5.3(e)(iii);

(g) DAS will have at least thirty (30) days to review, comment on and request removal of confidential information from any proposed publication reporting results of work with ZFP Products supplied to a Sublicensee and DAS shall not have the authority, without Sangamo's prior written consent, to approve any proposed publication that contains Sangamo Confidential Information;

(h) such research license shall not obligate (or purport to obligate) Sangamo, without Sangamo's express prior written consent, to any obligation other than Manufacture of ZFP Products under the terms and conditions set forth in Article 7;

(i) no ZFP Products to which a Third Party License under Section 8.11(b) is applicable will be supplied to a Sublicensee unless the applicable research license requires that the Sublicensee (i) assume the obligations set forth in Sections 8.11(c) and 8.11(d) and Exhibit D (as if such Sublicensee were DAS) with respect to each such Third Party License sublicensed thereunder, and (ii) acknowledge that the research license is subject to the terms and conditions of each such Third Party License.

(j) such research license shall terminate upon the termination of this Agreement for any reason or the termination of the Licensing Program pursuant to Section 11.5.

## ARTICLE 6

### DEVELOPMENT AND COMMERCIALIZATION OF LICENSED PRODUCTS

**6.1 DAS Products.** Sangamo shall have no responsibility for any costs or expenses incurred by DAS, its Affiliates, or any sublicensees in undertaking development or

commercialization of DAS Products.

**6.2 Trait Sublicensing.** DAS may license Third Parties to commercialize DAS ZFP Traits or DAS Products provided that (a) such Third Party does not have the right to use ZFP Products apart from such use that is inherent in the ZFP Trait, (b) the applicable agreement with the Third Party does not obligate (or purport to obligate) Sangamo in any way, and (c) such licenses do not grant any sublicenses or rights with respect to Sangamo Technology.

## ARTICLE 7

### MANUFACTURE AND SUPPLY

**7.1 Supply of ZFP Products.** Subject to Section 7.2, Sangamo shall be obligated to Manufacture and supply ZFP Products for use by the Parties and for use by Sublicensees. Quantities and delivery schedules for all ZFP Products to be used in the Research Program shall be set forth in the Research Plan. For ZFP Products to be used by Sublicensees, DAS shall negotiate quantities and delivery schedules for such ZFP Products on a case-by-case basis, provided, however, that such quantities and delivery schedules are reasonable and further provided that under normal circumstances (wherein at least \*\*\* of relevant target sequence is provided) Sangamo will deliver ZFP Products within \*\*\* (\*\*\*) weeks of request. For the supply of ZFP Products to DAS and Sublicensees, Sangamo will directly charge DAS or Sublicensees (as applicable) a transfer price reflecting solely (i) the cost of time and materials expended in Manufacturing such ZFP Products, and (ii) a reasonable allocation of overhead expenses and other indirect costs, where such overhead and indirect costs shall be no greater than charged in similar circumstances to other customers. The Parties agree that a reasonable estimate for the cost of a ZFP Product as of the Effective Date is \$\*\*\* and the cost is expected to go down. DAS, however, acknowledges and agrees that the time, effort, and cost associated with Sangamo's Manufacturing efforts is likely to vary significantly from ZFP Product to ZFP Product and that, as a result, Sangamo cannot, as of the Effective Date, commit to any particular price, quantity, or delivery schedule for the supply of ZFP Products. However, Sangamo will work collaboratively with DAS to establish a structured pricing platform for the supply of ZFP Products.

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**7.2 Transfer of Manufacturing Technology.** At any time following the end of the Option Period, DAS may request that Sangamo transfer the Manufacturing technology either to DAS or to a Contract Manufacturer selected by DAS and approved by Sangamo. Sangamo shall not unreasonably withhold approval of a Contract Manufacturer selected by DAS. Sangamo shall transfer to DAS or such Contract Manufacturer, as the case may be, all Information Controlled by Sangamo that is related to the Manufacturing of ZFP Products for use in the Field and is reasonably necessary or useful to enable DAS or such Contract Manufacturer (as appropriate) to Manufacture ZFP Products. It is anticipated that such transfer of Information will be complete within one (1) year after Sangamo's receipt of DAS's request, and Sangamo shall use commercially reasonable efforts to meet this deadline. The costs and expenses incurred by Sangamo in carrying out such transfer shall be reimbursed by DAS at the then-current Annual FTE rate.

**7.3 Technology Escrow.** Within ninety (90) days of the Effective Date, the Parties agree to establish, at DAS' sole expense, a technology escrow that will ensure that computer media containing the protocols and procedures for Manufacture of ZFP Products that are identified in Section 12.5(a) will be available to DAS upon occurrence of any of the following events:

- (a) the adjudication of Sangamo as a bankrupt by any court of competent jurisdiction;
- (b) the appointment of a trustee or receiver (or similar official) of all or a substantial part of the property of Sangamo under the federal Bankruptcy Act or any state court receivership proceedings, whether voluntary or involuntary, which appointment, if involuntary, is not removed within sixty (60) days;
- (c) the liquidation of Sangamo or its failure to continue in business (except in the event that such business has been acquired or assumed by another entity);
- (d) the filing by Sangamo of a voluntary petition in bankruptcy, or the consent to, or failure to dismiss within the time prescribed by law, of any bankruptcy proceedings instituted against it; or

(e) Refusal by Sangamo to allocate resources to Manufacture of ordered ZFP Products for a period of 90 consecutive days or more (unless a Contract Manufacturer is Manufacturing ZFP Products).

Sangamo will provide written confirmation upon completion of the deposit with the escrow agent. The technology escrow shall end, and the aforementioned computer media shall be returned to Sangamo upon the earlier of termination of this Agreement or completion of the Manufacturing technology transfer described in Section 7.2.

## ARTICLE 8 COMPENSATION

**8.1 License Fee.** In consideration for the licenses to Sangamo's patents and know-how set forth in Article 2 and access to Sangamo's archives of ZFP Products, DAS shall pay Sangamo a license fee of seven and a half million dollars (\$7,500,000) within thirty (30) days of the Effective Date. The license fee payment made by DAS to Sangamo pursuant to this Section 8.1 shall be noncreditable and nonrefundable.

**8.2 Stock Purchase.** Upon Sangamo's request, DAS or a DAS Affiliate will participate in Sangamo's next financing by purchasing up to four million dollars (\$4,000,000) of Sangamo common stock (but in no event greater than \*\*\* percent (\*\*\*) of the total round), subject to the terms of a separate stock purchase agreement and other agreements and related documents executed pursuant thereto. This obligation is further contingent on the following conditions:

- (a) The financing must close no later than October 1, 2006; and
- (b) The total round must be a minimum of 15 million dollars (\$15,000,000).

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### **8.3 Research Support.**

(a) DAS shall provide six million dollars (\$6,000,000) in research support to Sangamo for research projects carried out by Sangamo pursuant to the Research Plan during the Initial Research Period; however, this commitment is contingent upon (i) the JSC being able to agree upon research projects that are commercially and scientifically reasonable and (ii) the Agreement not terminating pursuant to Section 11.2. DAS will pay Sangamo against invoices for work actually carried out by Sangamo (based on the current Annual FTE Rate) and expenses incurred by Sangamo that were included in the Research Budget or otherwise authorized by the JSC in carrying out the Research Program; however, during the first eight quarters of the Initial Research Term (contract quarters will correspond to calendar quarters, ending on December 31, March 31, June 30, and September 30), DAS will advance to Sangamo a minimum of five hundred thousand dollars (\$500,000) per quarter, totaling four million dollars (\$4,000,000) for the first eight quarters. More specifically, at the beginning of each of the first eight quarters, Sangamo will invoice DAS for an advance of five hundred thousand dollars (\$500,000), and DAS will pay such amount within thirty (30) days of receiving the invoice. The second and subsequent six invoices will each be accompanied with a description of the services provided and expenses incurred by Sangamo in the previous quarter in reasonable detail demonstrating the specific basis for the charges. During the eighth quarter, the JSC will conduct a review of the Research Program pursuant to Section 3.5(c)(x). Unless DAS terminates this Agreement pursuant to Section 11.2, Sangamo will submit invoices at the end of the eighth and subsequent quarters, which will each be accompanied with a description of the services provided and expenses incurred by Sangamo in that quarter in reasonable detail demonstrating the specific basis for the charges, and DAS will pay Sangamo within thirty (30) days of receiving the invoice. If the amount advanced by DAS exceeds the services provided and expenses incurred by Sangamo during the first eight quarters, then the balance will be applied against subsequent invoices. However, if DAS terminates this Agreement pursuant to Section 11.2, Sangamo will not be required to refund any excess of the Research Funding advanced by DAS during for the first eight quarters of the Research Term.

(b) During the last quarter of the third contract year, and during the last quarter of the contract year for each subsequent year for so long as the Subsequent Research

Term continues, the JSC will determine whether the Subsequent Research Term will be extended for an additional year. DAS shall provide up to one million dollars (\$1,000,000) in research support to Sangamo during each year of the Subsequent Research Term, however, this commitment is contingent upon the JSC being able to agree upon research projects that are commercially and scientifically reasonable.

(c) Sangamo shall track and calculate the number of Sangamo FTEs involved in the Research Program using the then-current Annual FTE Rate and in accordance with Sangamo's then-current accounting methodology. In no event shall Sangamo be required during the Research Term to incur more expenses (including FTE-based expenses calculated at the then-current Annual FTE Rate) in the course of performing its obligations under the Research Plan than the amount that DAS is obligated to pay Sangamo pursuant to this Section 8.3.

(d) All research support payments made by DAS to Sangamo pursuant to this Section 8.3 shall be noncreditable and nonrefundable.

**8.4 Special Research Milestone Payments.** Within ninety (90) days of the Effective Date, the JSC will define events which when achieved will entitle Sangamo to receive a total of four million dollars (\$4,000,000) in special research milestone payments. These event definitions will be incorporated into the Research Plan. DAS will pay all such special research milestone payments to Sangamo within thirty (30) days after the earlier of (a) determination by the JSC that the corresponding event set forth in the Research Plan has been achieved and (b) Sangamo's receipt of the Option Exercise Notice. Within thirty (30) days of a request by either Party, the JSC shall hold a meeting by audio or video conference to make such a determination. In no event will the total amount of special research milestone payments paid by DAS pursuant to this Section 8.4 exceed four million dollars (\$4,000,000). If the special research milestone payments made by DAS prior to Sangamo's receipt of the Option Exercise Notice total less than four million dollars (\$4,000,000), then the balance will be paid to Sangamo thirty (30) days after Sangamo's receipt of the Option Exercise Notice. All special research milestone payments made by DAS to Sangamo pursuant to this Section 8.4 shall be noncreditable and nonrefundable.

**8.5 \*\*\* Milestone Payments.**

(a) Within thirty (30) days after the first satisfaction of a \*\*\* for a DAS Product, DAS shall pay Sangamo one million dollars (\$1,000,000). This is a one time payment, and DAS shall in no case be obligated to make this payment more than once.

(b) On the first anniversary of the first Full-scale Product Launch for a DAS Product that satisfies a \*\*\*, DAS shall pay Sangamo two million dollars (\$2,000,000). This is a one time payment and DAS shall in no case be obligated to make this payment more than once

(c) All \*\*\* milestone payments made by DAS to Sangamo pursuant to this Section 8.5 shall be noncreditable and nonrefundable.

(d) The payments called for in this Section 8.5 are in lieu of the Product Milestone Payments called for in Section 8.9(b) for the first \*\*\*.

**8.6 Option Fee.** DAS shall pay Sangamo an option fee of six million dollars (\$6,000,000) within thirty (30) days after it provides the Option Exercise Notice. The option fee payment made by DAS to Sangamo pursuant to this Section 8.6 shall be noncreditable and nonrefundable.

**8.7 Minimum Annual Payments.**

(a) If DAS exercises the Option, then DAS shall pay to Sangamo within thirty (30) days of each anniversary of the Effective Date starting with the third anniversary of the Effective Date, the Minimum Annual Payment obligation set forth in this Section 8.7 for the calendar year in which such anniversary occurs. The Minimum Annual Payment obligation for the calendar years in which the 3<sup>rd</sup> through 6<sup>th</sup> anniversaries occur are as follows:

<u>Anniversary of the Effective Date</u>	<u>Minimum Annual Payment Obligation</u>	
Third (October 1, 2008)	\$	***
Fourth (October 1, 2009)	\$	***
Fifth (October 1, 2010)	\$	***
Sixth (October 1, 2011)	\$	***

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The Minimum Annual Payment Obligation for each calendar year in which the seventh and subsequent anniversaries of the Effective Date occur, until the earlier of (i) DAS's termination of the Licensing Program pursuant to Section 11.5, (ii) the expiration of this Agreement pursuant to Section 11.1, or (iii) the termination of this Agreement pursuant to Section 11.4 or 11.6, shall be \*\*\* dollars (US \$\*\*\*)

(b) In each calendar year in which DAS has a Minimum Annual Payment Obligation, it will pay Sangamo, an amount equal to the applicable Minimum Annual Payment Obligation, less any Sublicensing Revenues paid to Sangamo for Sublicensing Revenues received by DAS during the first two quarters of the calendar year in which the Minimum Annual Payment is due. The amount due will be invoiced by Sangamo as of October 1st, and DAS shall pay Sangamo within thirty (30) days of receiving the invoice. Each payment made by DAS pursuant to this Section 8.7 is referred to as a Minimum Annual Payment.

(c) Each Minimum Annual Payment made by DAS to Sangamo pursuant to this Section 8.7 shall be nonrefundable but fully creditable against the following:

(i) the Sublicensing Revenue payments pursuant to Section 8.8 due for the third and fourth quarters of the calendar year in which such Minimum Annual Payment was made; and

(ii) the DAS Product Royalties pursuant to Section 8.10 due to Sangamo for the calendar year in which such Minimum Annual Payment was made.

(d) **Example of Operation of Minimum Annual Payment.** Accordingly, for example, if DAS is assumed to have paid Sangamo \$50,000 for Sublicensing Revenues received in the first two quarters of 2009, a year in which the Minimum Annual Payment obligation is \$\*\*\*, DAS would owe Sangamo a Minimum Annual Payment of \$\*\*\* - \$50,000 = \$\*\*\*, which Sangamo would invoice as of October 1, 2009. DAS's \$\*\*\* Minimum Annual Payment would be creditable against additional Sublicensing Revenues received during the third and fourth quarter and against the DAS Product Royalties due for the 2009 calendar year.

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### **8.8 Sublicensing Revenues.**

(a) Within thirty (30) days after the end of each calendar quarter during the Option Period, DAS shall pay Sangamo an amount equal to twenty-five percent (25%) of the Sublicensing Revenues received by DAS during such calendar quarter. The Sublicensing Revenue payments made by DAS to Sangamo pursuant to this Section 8.8(a) shall be noncreditable and nonrefundable.

(b) Within thirty (30) days after the end of each calendar quarter after the end of the Option Period, DAS shall pay Sangamo an amount equal to twenty-five percent (25%) of the Sublicensing Revenues received by DAS during such calendar quarter. The Sublicensing Revenue payments made by DAS to Sangamo pursuant to this Section 8.8(b) shall be noncreditable (except as set forth in Section 8.7) and nonrefundable.

(c) Each Sublicensing Revenue payment shall be accompanied by a statement itemizing the amount and type (e.g., license fee, milestone payment, royalty payment) of each payment received by DAS from each Sublicensee during the relevant calendar quarter.

### **8.9 DAS Product Milestone Payments**

(a) Subject to Sections 8.9(c), 8.9(d), 8.9(e) and 8.9(f), for each GMO Product, DAS shall make the milestone payments set forth below to Sangamo within thirty (30) days after the achievement of each of the following events:

- (i) \*\*\* dollars (\$\*\*\*) upon first filing for Regulatory Approval for such GMO Product;
- (ii) \*\*\* dollars (\$\*\*\*) upon first receipt of Regulatory Approval for such GMO Product; and
- (iii) \*\*\* dollars (\$\*\*\*) upon the first anniversary of the Full-scale Product Launch for such GMO Product.

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**(b)** Subject to Sections 8.9(c), 8.9(d), 8.9(e) and 8.9(f), for each Non-GMO Product, DAS shall make the milestone payments set forth below to Sangamo within thirty (30) days after the achievement of each of the following events:

- (i)** \*\*\* dollars (\$\*\*\*) upon first seeking \*\*\* for such \*\*\*;
- (ii)** \*\*\* dollars (\$\*\*\*) upon satisfaction of \*\*\* for such \*\*\*; and
- (iii)** \*\*\* dollars (\$\*\*\*) upon the first anniversary of the Full-scale Product Launch for such \*\*\*.

**(c)** The series of product milestone payments specified in Sections 8.9(a) or 8.9(b) will be applicable for each Major Crop in which a given Trait is inserted, but product milestone payments under this Section 8.9 will not apply to (i) insertions of a Trait in any crop other than a Major Crop to the extent that product milestone payments have already been made for that Trait under Section 8.9(a) or 8.9(b), or (ii) subsequent insertions of a Trait in a particular Major Crop to the extent that product milestone payments were previously made for insertion of that Trait in that Major Crop.

**(d)** product milestone payments applicable to a Stacking Crop Product will be \*\*\* percent (\*\*\*) of those specified in Sections 8.9(a) and 8.9(b).

**(e)** \*\*\* Products, \*\*\* Products, and \*\*\* Products will not bear product milestone payments.

**(f)** The applicability and amount, if any, of product milestone payments for any Licensed Product that does not fall within the definitions of Crop Product, Animal Health Product, Human Health Product, and Industrial Product will be determined pursuant to Section 8.17.

**(g)** All DAS Product milestone payments made by DAS to Sangamo pursuant to this Section 8.9 shall be noncreditable and nonrefundable.

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#### 8.10 DAS Product Royalties.

(a) **Crop Products.** DAS shall pay royalties to Sangamo at the rate of (i) \*\*\* percent (\*\*\*) of Net Average Trait Value of each Trait Crop Product and (ii) \*\*\* percent (\*\*\*) of Net Average Trait Value of each Stacking Crop Product. For each Crop Product for which the Net Average Trait Value is not determinable (because consumers are unwilling to pay separately for it, e.g. drought tolerance), but the applicable Trait will help preserve or expand sales, DAS shall pay Sangamo \$\*\*\* per acre of Crop Product (this is equivalent, for example, to \$\*\*\* per unit of corn, \$\*\*\* per bag of canola, and \$\*\*\* per bag of cotton).

(b) **Animal Health Products.** DAS shall pay royalties to Sangamo at the rate of \*\*\* percent (\*\*\*) of Net Sales of each Animal Health Product (including Food Safety Products).

(c) **Industrial Products.** DAS shall pay royalties to Sangamo at the rate of \*\*\* percent (\*\*\*) of Net Sales of each Industrial Product.

(d) **Human Health Products.** DAS shall pay royalties to Sangamo at the rate of \*\*\* percent (\*\*\*) of Net Sales of each Human Health Product.

(e) **Other Licensed Products.** The applicability and rate, if any, of product royalty for any Licensed Product that does not fall within the definitions of Crop Product, Animal Health Product, Human Health Product, and Industrial Product will be determined pursuant to Section 8.17.

(f) All royalties due under this Section 8.10 shall be paid annually, on a country-by-country basis, within sixty (60) days of the end of the relevant year for which royalties are due. Such royalty payments shall be nonrefundable and shall not be creditable against future Minimum Annual Payments.

(g) Sangamo's right to receive royalties under this Section 8.10 shall expire on a product-by-product and country-by-country basis upon expiration of the last to expire

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Sangamo Patent that claims the DAS Product or the ZFP Product used in the creation of such DAS Product or in the manufacture, use or sale of such DAS Product or ZFP Product.

**(h)** Notwithstanding Section 8.10(g), DAS will pay a royalty to Sangamo under this Section 8.10 for sales in any foreign country where Sangamo lacks patent protection until expiration of the last to expire U.S. Sangamo Patent that claims the DAS Product or the ZFP Product used in the creation of such DAS Product or in the manufacture, use or sale of such DAS Product or ZFP Product. However, if a Third Party enters the market in that foreign country with a product that (i) was created or made using a ZFP Product, and (ii) contains a competing Trait in the same crop as such DAS Product, then the royalty rate for sales of that DAS Product will be reduced by \*\*\*percent \*\*\*%) in that country for so long as such Third Party continues to market such product in such country.

**(i)** Each royalty payment shall be accompanied by a statement that includes sufficient information for Sangamo to understand DAS's calculation of such royalty payment, including without limitation the number, description, and aggregate Net Average Trait Value or Net Sales, by country, of each DAS Product sold during the relevant calendar year.

**(j) Royalties on Trait License Revenue.** When DAS licenses a DAS ZFP Trait to Third Parties, DAS will report the cash consideration received from the licensees for such DAS ZFP Trait and/or Licensed Products containing such DAS ZFP Trait, and shall pay royalties to Sangamo on such consideration, as if it were Net Average Trait Value or Net Sales (as applicable), at the rate set forth in this Section 8.10 for the applicable product category. DAS shall continue to have the obligations set forth in Section 8.11 with respect to such Licensed Products as if such products were DAS Products.

#### **8.11 Payments for Third Party Licenses.**

**(a) Third Party Licenses in Effect on Effective Date.** Sangamo (and not DAS) shall be responsible for paying all milestones, royalties and other compensation owed to Third Parties pursuant to Third Party Licenses identified in Exhibit C as of the Effective Date

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(including any post Effective Date amendments of such Third Party Licenses) on account of the generation, development and/or commercialization of Licensed Products by DAS, its Affiliates and sublicensees and the sale at cost by DAS or its Affiliates of ZFP Products Manufactured by DAS or its Affiliates. DAS shall provide and shall require its Affiliates and sublicensees to provide Sangamo, at least ten (10) days in advance of the applicable due date, with all information reasonably required by or useful to Sangamo to (i) ascertain when milestone payments are owed under Third Party Licenses, (ii) calculate the amounts of royalty payments due under Third Party Licenses, and (iii) provide required reports.

**(b) Third Party Licenses First Entered into after the Effective Date.** DAS shall be responsible for paying all milestones, royalties and other compensation owed to Third Parties pursuant to Third Party Licenses entered into after the Effective Date (and licensed to DAS pursuant to Section 2.6(b)) on account of the generation, development and/or commercialization of DAS Products by DAS, its Affiliates and sublicensees and the sale at cost by DAS or its Affiliates of ZFP Products Manufactured by DAS or its Affiliates. DAS shall pay to Sangamo such amounts owed to Third Parties pursuant to Third Party Licenses and shall provide Sangamo with any corresponding reports at least ten (10) days in advance of the applicable due date. Provided it receives such items in a timely manner, Sangamo shall pay such amounts to, and file such reports with, the applicable Third Party on or before the applicable due date.

**(c) Licensing Program.** Unless otherwise agreed in writing, DAS shall structure each Technology License so that the Sublicensee shall be responsible for paying all milestones, royalties and other compensation owed to Third Parties pursuant to Third Party Licenses referred to in Section 8.11(b) on account of the generation, development and/or commercialization of Licensed Products arising from such Sublicensee's activities in the Field. DAS shall collect the relevant payments and reports from Sublicensees and shall pay to Sangamo all amounts owed to Third Parties pursuant to Third Party Licenses referred to in Section 8.11(b) and shall provide Sangamo with any corresponding reports at least ten (10) days in advance of the applicable due date. Provided it receives such items in a timely manner, Sangamo shall pay such amounts to, and file such reports with, the applicable Third Party on or before the applicable due date.

**(d) Sublicense Issuance and Maintenance Fees.** DAS shall be responsible for all sublicense issuance and maintenance fees owed to Third Parties pursuant to Third Party Licenses referred to in Section 8.11(b) on account of DAS's licenses in Section 2.1. Each Sublicensee shall be responsible for all sublicense issuance and maintenance fees owed to Third Parties pursuant to Third Party Licenses referred to in Section 8.11(b) on account of such Sublicensee's Technology License. DAS shall collect such payments from such Sublicensees and shall pay such amounts, plus the amounts due on account of DAS's licenses in Section 2.1, to Sangamo at least ten (10) days before the applicable due date.

**(e) Upfront Fees.** Unless otherwise agreed in writing, the Parties shall share \*\*\* any upfront fees associated with Third Party Licenses referred to in Section 8.11(b).

**8.12 Payment Method.** All payments due under this Agreement to Sangamo shall be made by bank wire transfer in immediately available funds to an account designated by Sangamo. All payments hereunder shall be made in United States dollars.

**8.13 Taxes.** Sangamo shall pay any and all taxes levied on account of all payments it receives under this Agreement. If laws or regulations require that taxes be withheld, DAS will (i) deduct those taxes from the remittable payment, (ii) pay the taxes to the proper taxing authority, and (iii) send evidence of the obligation together with proof of tax payment to Sangamo within thirty (30) days following that tax payment.

**8.14 Foreign Exchange.** Conversion of sales recorded in local currencies to United States dollars will be performed in a manner consistent with DAS's normal practices used to prepare its audited financial statements for internal and external reporting purposes, which uses a widely accepted source of published exchange rates.

**8.15 Records; Inspection.** DAS shall keep complete, true and accurate books of account and records for the purpose of determining the payments to be made under this Agreement. Such books and records shall be kept for at least three (3) years following the end of the calendar quarter to which they pertain. Such records will open for inspection during such

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three (3) year period by independent accountants, solely for the purpose of verifying payment statements hereunder. Such inspections shall be made no more than once each calendar year, at reasonable time and on reasonable notice. Inspections conducted under this Section 8.15 shall be at the expense of Sangamo, unless a variation or error producing an increase exceeding five percent (5%) of the amount paid for any period covered by the inspection is established in the course of such inspection, whereupon all costs relating to the inspection for such period will be paid promptly by DAS. DAS shall promptly pay to Sangamo any unpaid amounts (plus interest) that are discovered as a result of an inspection hereunder.

**8.16 Interest.** If DAS fails to make any payment due to Sangamo under this Agreement, then interest shall accrue on a daily basis at a rate equal to \*\*\* percent (\*\*\*) above the then-applicable prime commercial lending rate of CitiBank, N.A. San Francisco, California, or at the maximum rate permitted by applicable law, whichever is the lower.

**8.17 Negotiation of Compensation for Other Licensed Products.** In the event that DAS develops a Licensed Product that does not fall within the definitions of Crop Product, Animal Health Product, Human Health Product, or Industrial Product, the Parties will discuss in good faith an amendment to this Agreement to provide a fair and reasonable financial return to Sangamo based on industry norms for that type of product, which return may include product milestone payments and product royalty payments. Such discussions will be initiated before DAS advances the Licensed Product from its discovery research phase to its product development phase. If the Parties are unable to agree on the applicability or amounts of such payments, the dispute will be referred, upon written notice by either Party, to the CEOs. Within twenty (20) days after such notice, the CEOs shall meet for attempted resolution by good faith negotiations. If the CEOs are unable to resolve such dispute within thirty (30) days of their first meeting for such negotiations, then either Party may seek to have such dispute finally settled by a single arbitrator under the rules of the American Arbitration Association applicable to expedited arbitrations. The amounts to be paid by DAS to Sangamo with respect to the development and commercialization of a Licensed Product to which this Section 8.17 pertains shall be agreed upon by the Parties or resolved by the dispute resolution procedures set forth

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herein and set forth in an amendment to this Agreement prior to the first commercial sale of such Licensed Product. DAS shall refrain from making such a first commercial sale until such amendment is executed by both Parties.

**ARTICLE 9**  
**INTELLECTUAL PROPERTY**

**9.1 Disclosure of Inventions; Ownership of Intellectual Property.**

(a) At a regular interval to be agreed by the Parties (but no less than two times per year), the Parties shall disclose to each other the making, development, conception, or reduction to practice of all Improvements, Product Specific Inventions, and Program Inventions, to extent that any of the foregoing were made, developed, conceived, or reduced to practice since the previous new invention disclosure.

(b) Ownership of the Sangamo Know-How and Sangamo Patents shall be and remain vested at all times in Sangamo.

(c) DAS shall own any Product Specific Invention that relates to a DAS Product.

(d) DAS Improvements and DAS Improvement Patents shall be owned by DAS (subject to Sangamo's world-wide, royalty-free, exclusive license for all uses outside the Field, including the right to sublicense, which it shall have pursuant to Section 2.3(b)).

(e) Joint Inventions and Joint Patents shall be jointly owed by DAS and Sangamo, with each Party having an undivided one-half interest in each Joint Invention and Joint Patent. Each Party may practice and grant licenses under each Joint Invention and Joint Patent without the consent of, or a duty of accounting to, the other Party, provided that such practice and licenses are consistent with such Party's rights under this Agreement. Without limiting the generality of the foregoing, DAS's rights in the Joint Inventions and Joint Improvements shall be subject to Sangamo's world-wide, royalty-free, exclusive license for all uses outside the Field,

including the right to sublicense, which it shall have pursuant to Section 2.3(b).

(f) Ownership of Improvements made by Sublicensees pursuant to Technology Licenses will be governed by the applicable Technology License, but shall in every case be subject to Sangamo's world-wide, royalty-free, exclusive license for all uses outside the Field, including the right to sublicense, which it shall have pursuant to Section 5.2(d).

(g) Program Inventions and Program Patents (other than Joint Program Inventions and Joint Program Patents, which are addressed in Section 9.1(e)) shall be owned in accordance with inventorship, subject to the licenses the Parties have granted to each other pursuant to this Agreement.

## **9.2 Employees; Cooperation.**

(a) Each Party represents and agrees that all employees or others acting on its behalf in performing its obligations under this Agreement shall be obligated under a binding written agreement to assign to such Party all inventions (and all related intellectual property) made or conceived by such employee or other person during and in connection with the Collaboration. The Parties agree to undertake to enforce such agreements (including, where appropriate, by legal action) considering, among other things, the commercial value of such inventions.

(b) The Party responsible for filing, prosecution, or maintenance of a particular Field-Specific Sangamo Patent, Program Patent, or Improvement Patent pursuant to Section 9.3(b)(i), 9.4, or 9.5 (the "**Filing Party**") shall consult with and keep other Party (the "**Non-Filing Party**") fully informed of all issues relating to the preparation, filing, prosecution and maintenance of such patent, and shall furnish to the Non-Filing Party copies of all documents received from, and filed in, the applicable Patent Office. The Filing Party shall provide to the Non-Filing Party copies of documents relevant to such preparation, filing, prosecution or maintenance in sufficient time prior to filing such document or making any payment due thereunder to allow for review and comment by the Non-Filing Party, and the Filing Party shall consider such comments in good faith.

## **9.3 Filing, Prosecution and Maintenance of Sangamo Patents.**

**(a)** Except as set forth in Section 9.3(b), Sangamo shall, as between the Parties, have the sole right to file, prosecute, and/or maintain the Sangamo Patents, including Sangamo Program Patents, at its sole discretion, for which it shall bear all associated costs and expenses.

**(b)** Solely following the end of the Option Period (but ending upon the termination of this Agreement), the following rights and obligations shall apply:

**(i)** As between the Parties, DAS shall have the first right to file, prosecute, and/or maintain all Field Specific Sangamo Patents, for which it shall bear all associated costs and expenses. DAS shall have the right to select the countries in which it files, continues to prosecute, or maintain the Field Specific Sangamo Patents. Should DAS decide not to file or continue prosecuting or maintaining a particular Field Specific Sangamo Patent, it shall notify Sangamo in writing promptly after such decision is made and not less than sixty (60) days prior to any applicable deadline. Thereafter, Sangamo shall have the right, but not the obligation, to assume such filing, prosecution and maintenance at its sole cost and expense.

**(ii)** As between the Parties, Sangamo shall have the first right to file, prosecute, and/or maintain all Generally Applicable Sangamo Patents, for which it shall bear all associated costs and expenses. Sangamo shall use commercially reasonable efforts to conduct its filing and prosecution of Generally Applicable Sangamo Patents so as to obtain broad patent protection in the Field where commercially reasonable and available. Should Sangamo decide not to file or continue prosecuting or maintaining a particular Generally Applicable Sangamo Patent, it shall notify DAS in writing promptly after such decision is made and not less than sixty (60) days prior to any applicable deadline. Thereafter, to the extent that no Third Party has a right to assume the prosecution and maintenance of such Generally Applicable Sangamo Patent, DAS may assume such prosecution and maintenance at its sole cost and expense.

**(c)** DAS's rights under this Section 9.3 with respect to any Sangamo Patent licensed to Sangamo by a Third Party shall be subject to the rights of such Third Party to file, prosecute, and/or maintain such Sangamo Patent.

**9.4 Filing, Prosecution and Maintenance of DAS Improvement Patents and DAS Program Patents.** DAS shall have the first right to file, prosecute, and/or maintain all DAS Improvement Patents and DAS Program Patents, for which it shall bear all associated costs and expenses. Should DAS decide not to file or continue prosecuting or maintaining a particular DAS Program Patent or DAS Improvement Patent, it shall notify Sangamo in writing promptly after such decision is made and not less than sixty (60) days prior to any applicable deadline. Thereafter, Sangamo shall have the right, but not the obligation, to assume such filing, prosecution and maintenance at its sole cost and expense.

**9.5 Filing, Prosecution and Maintenance of Joint Patents.**

(a) Sangamo shall have the first right to file, prosecute, and/or maintain all Joint Patents (including Joint Program Patents and Joint Improvement Patents), the claims of which are not specific to the Field, for which it shall bear all associated costs and expenses. Should Sangamo decide not to file or continue prosecuting or maintaining a particular Joint Patent, it shall notify DAS in writing promptly after such decision is made and not less than sixty (60) days prior to any applicable deadline. Thereafter, DAS shall have the right, but not the obligation, to assume such filing, prosecution and maintenance at its sole cost and expense.

(b) DAS shall have the first right to file, prosecute, and/or maintain all Joint Patents (including Joint Program Patents and Joint Improvement Patents), the claims of which are specific to the Field, for which it shall bear all associated costs and expenses. Should DAS decide not to file or continue prosecuting or maintaining any such patent, it shall notify Sangamo in writing promptly after such decision is made and not less than sixty (60) days prior to any applicable deadline. Thereafter, Sangamo shall have the right, but not the obligation, to assume such filing, prosecution and maintenance at its sole cost and expense.

**9.6 Enforcement and Defense of Sangamo Patents**

(a) If either Party becomes aware of any Third Party activity in the Field that infringes a Sangamo Patent, or any allegation by a Third Party that a Sangamo Patent is invalid or unenforceable (collectively, for the purpose of this Section 9.6, "**Infringement**"), then that Party shall give prompt written notice to the other Party regarding such Infringement.

**(b)** With respect to any Infringement of a Generally Applicable Sangamo Patent:

**(i)** As between the Parties, Sangamo shall have the first right, but not the obligation, to attempt to resolve such Infringement by commercially appropriate steps, including without limitation the filing of an infringement suit using counsel of its own choice.

**(ii)** If Sangamo fails to resolve such Infringement or to initiate or defend a suit with respect thereto within one hundred twenty (120) days after delivery of the notice set forth in Section 9.6(a), then upon DAS's request and Sangamo's written consent (not to be unreasonably withheld), DAS shall have the right, but not the obligation, to attempt to resolve such Infringement by commercially appropriate steps, including without limitation the filing of an infringement suit using counsel of its own choice. If DAS institutes such a suit with respect to a Generally Applicable Sangamo Patent designated as a Core Sangamo Patent, it shall have the right to set off twenty-five percent (25%) of its litigation costs directly associated with such action against any payments owed to Sangamo.

**(c)** With respect to any Infringement of a Field Specific Sangamo Patent:

**(i)** DAS shall have the right, but not the obligation, to attempt to resolve such Infringement by commercially appropriate steps, including without limitation the filing of an infringement suit using counsel of its own choice, but only to the extent that Sangamo would otherwise have the right to enforce such Field Specific Sangamo Patent.

**(ii)** If DAS fails to resolve such Infringement or to initiate or defend a suit with respect thereto within one hundred twenty (120) days after delivery of the notice set forth in Section 9.6(a), then Sangamo shall have the right, but not the obligation, to attempt to resolve such Infringement by commercially appropriate steps, including without limitation the filing of an infringement suit using counsel of its own choice.

**(d)** In any event, the Party not bringing an infringement action under this Section 9.6 agrees to be joined as a party to the suit, at the request and expense of the Party bringing such action, and to provide reasonable assistance in any such action, at the requesting Party's expense. Neither Party shall settle or otherwise compromise any such action in a way

that adversely affects the other Party's intellectual property rights without such Party's prior written consent.

(e) Any amounts recovered by the Party taking an action pursuant to this Section 9.6, whether by settlement or judgment, shall be allocated first to reimburse the Party taking such action for any costs and expenses incurred and, second, to reimburse Sangamo for any set offs taken by DAS, pursuant to subsection (b)(ii) above, against payments otherwise due to Sangamo. Any remaining recovery shall be shared by the Parties in proportion to the percentage of litigation expenses funded by each Party. Any set offs taken by DAS pursuant to subsection (b)(ii) above shall be treated as a funding of litigation expenses by Sangamo.

(f) DAS's rights under this Section 9.6 with respect to any Sangamo Patent licensed to Sangamo by a Third Party shall be subject to the rights of such Third Party to enforce such Sangamo Patent and/or defend against any claims that such Sangamo Patent is invalid or unenforceable.

#### **9.7 Enforcement and Defense of DAS Improvement Patents and DAS Program Patents**

(a) If either Party becomes aware of any Third Party activity that infringes a DAS Improvement Patent or DAS Program Patent or any allegation by a Third Party that such a DAS Improvement Patent or DAS Program Patent is invalid or unenforceable, then that Party shall give prompt written notice to the other Party regarding such infringement.

(b) With respect to infringement involving Third Party activity outside the Field or any allegation that a DAS Improvement Patent or DAS Program Patent is invalid or unenforceable (subject to Section 9.7(d)), DAS shall have the first right, but not the obligation, to attempt to resolve such infringement or allegation, whether by settlement or judgment. If DAS fails to resolve such infringement or to initiate or defend a suit with respect thereto within one hundred twenty (120) days after delivery of the notice set forth in Section 9.7(a), then Sangamo shall have the right, but not the obligation, to attempt to resolve such infringement by commercially appropriate steps, including without limitation the filing of an infringement suit using counsel of its own choice.

(c) With respect to infringement involving Third Party activity solely in the Field, DAS shall have the right, but not the obligation, to attempt to resolve such infringement or allegation, whether by settlement or judgment.

(d) A Party's right to initiate a patent infringement suit under this Section 9.7 shall include the right to resolve any allegation that a Improvement Patent is invalid or unenforceable brought as a counterclaim in such suit.

(e) In any event, the Party not bringing an infringement action under this Section 9.7 agrees to be joined as a party to the suit, at the request and expense of the Party bringing such action, and to provide reasonable assistance in any such action, at the requesting Party's expense. Neither Party shall settle or otherwise compromise any such action in a way that adversely affects the other Party's intellectual property rights without such Party's prior written consent.

(f) Any amounts recovered by the Party taking an action pursuant to Section 9.7(b), whether by settlement or judgment, shall be allocated first to reimburse the Party taking such action for any costs and expenses incurred and, any remaining recovery shall be shared by the Parties in proportion to the percentage of litigation expenses funded by each Party.

**9.8 Enforcement and Defense of Joint Patents.**

(a) If either Party becomes aware of any Third Party activity that infringes a Joint Patent, or any allegation by a Third Party that a Joint Patent is invalid or unenforceable, then that Party shall give prompt written notice to the other Party regarding such infringement.

(b) With respect to infringement of a Joint Patent involving Third Party activity outside the Field:

(i) Sangamo shall have the right, but not the obligation, to attempt to resolve such infringement by commercially appropriate steps, including without limitation the filing of an infringement suit using counsel of its own choice. If Sangamo institutes such a suit with respect to a Joint Patent, it will do so at its expense, and will be entitled to keep all recoveries.

**(ii)** If Sangamo fails to resolve such infringement or to initiate or defend a suit with respect thereto within one hundred twenty (120) days after delivery of the notice set forth in Section 9.8(a), then DAS shall have the right, but not the obligation, to attempt to resolve such infringement by commercially appropriate steps, including without limitation the filing of an infringement suit using counsel of its own choice. If DAS initiates such a suit with respect to a Joint Patent it will do so at its own expense, and will be entitled to keep all recoveries.

**(c)** With respect to infringement of a Joint Patent involving Third Party activity in the Field or any allegation that a Joint Patent is invalid or unenforceable (subject to Section 9.8(d)):

**(i)** DAS shall have the right, but not the obligation, to attempt to resolve such infringement or allegation by commercially appropriate steps, including without limitation the filing of an infringement suit using counsel of its own choice. If DAS institutes such a suit with respect to a Joint Patent, it will do so at its expense, and will be entitled to keep all recoveries.

**(ii)** If DAS fails to resolve such infringement or allegation or to initiate or defend a suit with respect thereto within one hundred twenty (120) days after delivery of the notice set forth in Section 9.8(a), then Sangamo shall have the right, but not the obligation, to attempt to resolve such infringement by commercially appropriate steps, including without limitation the filing of an infringement suit using counsel of its own choice. If Sangamo initiates such a suit with respect to a Joint Patent it will do so at its own expense, and will be entitled to keep all recoveries.

**(d)** Notwithstanding Section 9.8(c), a Party's right to initiate a patent infringement suit under this Section 9.8 shall include the right to resolve any allegation that a Joint Patent is invalid or unenforceable brought as a counterclaim in such suit.

**(e)** In any event, the Party not bringing an infringement action under this Section 9.8 agrees to be joined as a party to the suit, at the request and expense of the Party bringing such action, and to provide reasonable assistance in any such action, at the requesting



Party's expense. Neither Party shall settle or otherwise compromise any such action in a way that adversely affects the other Party's intellectual property rights without such Party's prior written consent.

**9.9 Defense of Third Party Infringement Claims.** If a Third Party asserts that a patent or other right Controlled by it is infringed by activities in the Field or a Party becomes aware of a patent or other right that might form the basis for such a claim, the Party first obtaining knowledge of such a claim or such potential claim shall immediately provide the other Party with notice thereof and the related facts in reasonable detail. The Parties shall discuss the merits of such claim or potential claims and shall attempt in good faith to mutually agree whether to obtain a license from such Third Party and whether to make any modifications to the Research Plan or the Licensing Program. If the intellectual property pertains to ZFP Products both inside and outside the Field, then, as between the Parties, Sangamo shall be the party that enters into any license agreement with such Third Party and DAS shall be entitled to a sublicense in the Field under such license agreement (or any license agreement entered into by Sangamo hereunder that pertains to ZFP Products in the Field) if it follows the procedures therefor set forth in Section 2.6(b). Neither Party shall be required to conduct any work under this Agreement which it believes in good faith may infringe Third Party patent or other intellectual property rights. Except as set forth in Article 13 or otherwise agreed in writing by the Parties, each Party shall control and bear the expense of its own defense of such Third Party claim.

## ARTICLE 10

### CONFIDENTIALITY

**10.1 Nondisclosure of Confidential Information.** All Information disclosed by one Party to the other Party pursuant to this Agreement shall be "Confidential Information" for all purposes hereunder. The Parties agree that during the term of this Agreement and for a period of seven (7) years thereafter, a Party receiving Confidential Information of the other Party will (i) use commercially reasonable efforts to maintain in confidence such Confidential Information (but not less than those efforts as such Party uses to maintain in confidence its own proprietary industrial information of similar kind and value) and not to disclose such Confidential

Information to any Third Party without prior written consent of the other Party, except for disclosures made in confidence to any Third Party under terms consistent with this Agreement and made in furtherance of this Agreement or of rights granted to a Party hereunder, and (ii) not use such other Party's Confidential Information for any purpose except those permitted by this Agreement (it being understood that this subsection (ii) shall not create or imply any rights or licenses not expressly granted under Article 2).

**10.2 Exceptions.** The obligations in Section 10.1 shall not apply with respect to any portion of the Confidential Information that the receiving Party can show by competent written proof:

- (a) Is publicly disclosed by the disclosing Party, either before or after it is disclosed to the receiving Party hereunder; or
- (b) Was known to the receiving Party or any of its Affiliates, without obligation to keep it confidential, prior to disclosure by the disclosing Party; or
- (c) Is subsequently disclosed to the receiving Party or any of its Affiliates by a Third Party lawfully in possession thereof and without obligation to keep it confidential; or
- (d) Is published by a Third Party or otherwise becomes publicly available or enters the public domain, either before or after it is disclosed to the receiving Party; or
- (e) Has been independently developed by employees or contractors of the receiving Party or any of its Affiliates without the aid, application or use of Confidential Information.

**10.3 Authorized Disclosure.** A Party may disclose the Confidential Information belonging to the other Party to the extent such disclosure is reasonably necessary in the following instances:

- (a) Disclosures required by operation of law or court order (provided the Party required to disclose Confidential Information belonging to the other Party gives the other Party as much prior notice as is reasonably practicable and discloses only such information as it is obligated to); and

(b) Disclosures in connection with the performance of this Agreement to Affiliates, potential collaborators, partners, and licensees, research collaborators, potential investment bankers, investors, lenders, and investors, employees, consultants, or agents, each of whom prior to disclosure must be bound by similar obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 10.

The Parties acknowledge that the terms of this Agreement shall be treated as Confidential Information of both Parties. Such terms may be disclosed by a Party to individuals or entities covered by Section 10.3(b) above, each of whom prior to disclosure must be bound by similar obligations of confidentiality and non-use at least equivalent in scope to those set forth in this Article 10. In addition, a copy of this Agreement may be filed by either Party with the Securities and Exchange Commission. In connection with any such filing, such Party shall endeavor to obtain confidential treatment of economic and trade secret information, shall provide the other Party with an opportunity to review and comment on such Party's proposed redactions, and shall give due consideration to any such comments, and shall use commercially reasonable efforts to obtain acceptance of redactions reasonably requested by the other Party. With respect to any Third Party License that requires Sangamo to provide to the applicable Third Party licensor a copy of this Agreement or a summary of the terms of this Agreement, Sangamo may provide such copy or summary to such Third Party licensor.

In any event, the Parties agree to take all reasonable action to avoid disclosure of Confidential Information except as permitted hereunder.

**10.4 Termination of Prior Agreements.** This Agreement supersedes the Secrecy Agreements between Sangamo and DAS dated June 13, 2005, as amended, and August 15, 2002. All Information exchanged between the Parties under such earlier agreements shall be deemed Confidential Information of the disclosing Party and shall be subject to the terms of this Article 10.

**10.5 Publicity.** The Parties agree that the public announcement of the execution of this Agreement shall be substantially in the form of the press release attached as Exhibit E. Any other publication, news release or other public announcement relating to this Agreement or to the performance hereunder, shall first be reviewed and approved by both Parties; provided, however,

that any disclosure which is required by law as advised by the disclosing Party's counsel may be made without the prior consent of the other Party, although the other Party shall be given prompt notice of any such legally required disclosure and to the extent practicable shall provide the other Party an opportunity to comment on the proposed disclosure.

**10.6 Publications.** Neither Party shall publish or present the results of studies carried out under this Agreement during the Option Period without the opportunity for prior review by the other Party. This obligation is limited to publications or presentations that reveal that ZFP Products or use thereof are connected with the subject matter being published; it would not apply, for example, to publication of the results of testing a Trait if it is not revealed that the Trait is the result of using zinc finger technology. Subject to Section 10.3, each Party agrees to provide the other Party the opportunity to review any proposed abstracts, manuscripts or presentations (including verbal presentations) which relate to the Field at least thirty (30) days prior to its intended submission for publication and agrees, upon request, not to submit any such abstract or manuscript for publication until the other Party is given a reasonable period of time to secure patent protection for any material related to such publication which it believes to be patentable. Both Parties understand that a reasonable commercial strategy may require delay of publication of information or filing of patent applications. The Parties agree to review and consider delay of publication and filing of patent applications under certain circumstances. The JSC will review such requests and recommend subsequent action. Neither Party shall have the right to publish or present Confidential Information of the other Party which is subject to Section 10.1.

**10.7 Patents.** If disclosure of Confidential Information of one Party is necessary or useful in prosecution of a patent application being prosecuted by the other Party, the Party to whom the Confidential Information belongs will, on request, consider permitting use of the information and will provide the requesting party with a decision without undue delay.

## ARTICLE 11 TERM AND TERMINATION

**11.1 Term.** This Agreement shall become effective on the Effective Date and shall expire upon the last payment obligation as provided in Sections 8.5 and 8.8-8.11, unless earlier terminated in accordance with Section 11.2, 11.3, 11.4 or 11.6. Termination of the Subsequent Research Term pursuant to Section 4.1 shall not constitute termination of this Agreement, although termination of this Agreement shall result in termination of the Research Term. Termination of the Licensing Program pursuant to Section 11.5 shall not constitute termination of this Agreement, although termination of this Agreement shall result in termination of the Licensing Program.

**11.2 Termination after Critical Review of Research Program.** This Agreement may be terminated by DAS by written notice to Sangamo if the critical review of the Research Program pursuant to Section 3.5(c)(x) leads to a finding that exercise of the Option is highly unlikely, provided that such written notice is received by Sangamo prior to the end of the eighth calendar quarter of the Initial Research Term. Such termination shall be effective as of the end of the eighth calendar quarter of the Initial Research Term and shall have the following effect:

(a) all licenses and rights granted to DAS under this Agreement (including without limitation the licenses and rights set forth in Section 2.1) shall terminate;

(b) all research licenses granted by DAS pursuant to Section 2.1(a)(ii) shall terminate;

(c) DAS shall promptly assign to Sangamo all Technology Licenses then in effect that satisfy Section 11.8. Sangamo may also request assignment of Technology Licenses that do not satisfy Section 11.8, in which case DAS will also make such requested assignments. DAS shall promptly transfer to Sangamo all Information necessary for Sangamo to take over all obligations in Technology Licenses for which Sangamo requests assignment. Sangamo shall be entitled to receive and keep one hundred percent (100%) of all payments made by the relevant Sublicensee after such assignment, and Sangamo shall not have any obligation to share any portion of such payments with DAS;

(d) with respect to each Technology License then in effect that does not satisfy Section 11.8 and for which Sangamo has not requested assignment, DAS shall continue to

perform all obligations under such Technology License and shall pay to Sangamo all payments (or other consideration) made by the relevant Sublicensee after the termination effective date, provided that DAS shall be entitled to retain, from such payments (or other consideration), an amount equal to DAS's documented out-of-pocket and personnel costs incurred in the course of performing such obligations;

(e) DAS shall assign to Sangamo DAS's entire right, title and interest in and to the Program Inventions and Improvements made during the Option Period (and all patents and patent applications claiming such Program Inventions and Improvements), and the license granted to Sangamo under Section 2.3(b) shall terminate solely with respect to such Program Inventions, Improvements, patents, and patent applications;

(f) DAS shall grant to Sangamo and its Affiliates a worldwide, fully paid, perpetual, irrevocable, non-exclusive license (with the right to sublicense) to practice the DAS Improvements and DAS Program Inventions (and any patents and patent applications claiming DAS Improvements and DAS Program Inventions) (in each case, to the extent not assigned to Sangamo under Section 11.2(e)), for all purposes in the Field; and

(g) DAS shall provide Sangamo with a complete and accurate list of (i) all projects in which DAS, a DAS Affiliate, or a Sublicensee (to the extent of DAS's knowledge) practiced the Sangamo Technology in the Field prior to the termination effective date and (ii) all Licensed Products in existence as of the effective date of termination.

**11.3 Termination at End of Initial Research Term.** If Sangamo does not receive an Option Exercise Notice and the fee set forth in Section 8.6 before the end of the Initial Research Term, then this Agreement shall automatically terminate on the third anniversary of the Effective Date. Such termination shall have the same effects as set forth in Section 11.2.

**11.4 Termination at Will.** At any time after Sangamo's receipt of the Option Exercise Notice and the fee set forth in Section 8.6, DAS may terminate this Agreement in its entirety by providing sixty (60) days written notice thereof to Sangamo. Such termination shall have the same effect as set forth in Section 11.2; provided, however, that DAS may continue to make and sell any DAS Product that was commercialized prior to the termination for so long as

DAS continues to pay the applicable milestones and royalties due under Article 8.

**11.5 Termination of Licensing Program.** At any time after the earlier of the expiration of the last Core Patent or January 1, 2019, DAS may terminate the Licensing Program by providing sixty (60) days written notice thereof to Sangamo. Termination of the Licensing Program pursuant to this Section 11.5 shall not constitute termination of this Agreement but shall have the following effects:

(a) except as provided in this Section 11.5, the licenses and rights set forth in Sections 2.1(a)(ii), 2.1(a)(iii), 2.1(b)(i)(2), and all provisions of Article 5 shall terminate, and DAS shall no longer have the right to grant Technology Licenses or research licenses pursuant to Section 2.1(a)(ii), or to Manufacture ZFP Products for sale to Sublicensees;

(b) the licenses set forth in Sections 2.1(a)(i) and 2.1(b)(ii) shall remain in effect, and DAS's rights and obligations with respect to DAS Products, including without limitation those rights and obligations set forth in Article 6 and Sections 8.5 and 8.8-8.11, shall remain in effect;

(c) DAS shall no longer have the obligation to make minimum annual payments pursuant to Section 8.7;

(d) DAS shall continue to have the right pursuant to Section 2.1(b)(i)(1) to Manufacture ZFP Products for its own use in the Field and Sangamo will remain obligated to supply ZFP Products to DAS for DAS's use in the Field on the terms described in Article 7;

(e) all research licenses granted by DAS pursuant to Section 2.1(a)(ii) shall terminate;

(f) DAS shall promptly assign to Sangamo all Technology Licenses then in effect that satisfy Section 11.8. Sangamo may also request assignment of Technology Licenses that do not satisfy Section 11.8, in which case DAS will also make such requested assignments. DAS shall promptly transfer to Sangamo all Information necessary for Sangamo to take over all obligations in Technology Licenses for which Sangamo requests assignment. Sangamo shall be entitled to receive and keep one hundred percent (100%) of all payments made by the relevant

Sublicensee after such assignment, and Sangamo shall not have any obligation to share any portion of such payments with DAS; and

(g) with respect to each Technology License then in effect that does not satisfy Section 11.8 and for which Sangamo has not requested assignment, DAS shall continue to perform all obligations under such Technology License and shall pay to Sangamo all payments (or other consideration) made by the relevant Sublicensee after the termination effective date, provided that DAS shall be entitled to retain, from such payments (or other consideration), an amount equal to DAS's documented out-of-pocket and personnel costs incurred in the course of performing such obligations.

**11.6 Termination for Material Breach.**

(a) If either Party believes that the other Party is in material breach of this Agreement (including without limitation any material breach of a representation or warranty made in this Agreement), then the non-breaching Party may deliver notice of such breach to the other Party. In such notice the non-breaching Party shall identify the actions or conduct that such Party would consider to be an acceptable cure of such breach. For all breaches other than a failure to make a payment set forth in Article 8, the allegedly breaching Party shall have sixty (60) days to either cure such breach. For any breach arising from a failure to make a payment set forth in Article 8, the allegedly breaching Party shall have thirty (30) days to cure such breach.

(b) If the Party receiving notice of breach fails to cure such breach within the 60-day period or 30-day period (as applicable), the Party originally delivering the notice may terminate this Agreement upon written notice.

(c) If a Party gives notice of termination under this Section 11.6 and the other Party disputes in good faith whether such notice was proper, then the issue of whether this Agreement has been terminated shall be resolved in accordance with Section 14.1. If as a result of such dispute resolution process it is determined that the notice of termination was proper, then such termination shall be deemed to have been effective if the breaching Party fails thereafter to cure such breach in accordance with the determination made in the resolution process under Section 14.1 within the time period set forth in Section 11.6 for the applicable breach following



such determination. If as a result of such dispute resolution process it is determined that the notice of termination was improper, then no termination shall have occurred and this Agreement shall have remained in effect.

**(d)** Termination of this Agreement pursuant to this Section 11.6 shall have the following effects:

**(i)** all licenses granted to DAS under this Agreement (including without limitation the licenses set forth in Section 2.1) shall terminate; provided, however, such licenses shall continue solely to the extent necessary for DAS to satisfy its obligations under this Section 11.6(d);

**(ii)** the rights and obligations of the Parties set forth in Sections 11.2(b), 11.2(c), 11.2(d), and 11.2(g) shall apply; and

**(iii)** if terminated as a result of breach by DAS, the rights and obligations of the Parties set forth in Sections 11.2(e) and 11.2(f) shall also apply.

**11.7 Effect of Termination; Survival.**

**(a)** In addition to the specific items identified as effects of termination pursuant to Section 11.2, 11.3, 11.4, or 11.6, the following provisions of this Agreement shall survive any expiration or termination of this Agreement, regardless of cause: Sections 2.3(b) (except as set forth in Section 11.2(e)), 2.5, 7.3 (solely with respect to the final sentence thereof), 8.15, 9.1 (other than 9.1(a) and except to the extent that such ownership was transferred to Sangamo pursuant to Section 11.2, 11.3, 11.4, or 11.6), 9.2(b) (but only as relates to Sections 9.4 and 9.5), 9.4 (but only to the extent Sangamo retains an exclusive license under the DAS Improvement Patents and/or DAS Program Patents), 9.5, 9.7 (but only to the extent Sangamo retains an exclusive license under the DAS Improvement Patents and/or DAS Program Patents), 9.8, 11.2, 11.3, 11.4, 11.6, 11.7, 14.1, 14.2, 14.3, 14.6, 14.8, 14.16, and 14.18, and Articles 10 and 13.

**(b)** In any event, termination of this Agreement shall not relieve the Parties of any liability which accrued hereunder prior to the effective date of such termination nor preclude

either Party from pursuing all rights and remedies it may have hereunder or at law or in equity with respect to any breach of this Agreement nor prejudice either Party's right to obtain performance of any obligation.

(c) In the event this Agreement is terminated pursuant to Section 11.2, 11.3, 11.4, or 11.6, DAS shall cease, and shall cause its Affiliates and sublicensees (other than Sublicensees under Technology Licenses that continue in effect) to cease, all development and commercialization (except commercialization explicitly permitted by Section 11.4) of DAS Products and Licensed Products based on DAS ZFP Traits, and DAS shall not use or practice, nor shall it cause or permit any of its Affiliates or such sublicensees to use or practice, directly or indirectly, any Sangamo Technology, except to the extent necessary for DAS to satisfy its obligations under Section 11.2, 11.3, 11.4, or 11.6, as applicable

**11.8** Upon termination of the Agreement pursuant to Section 11.2, 11.3, 11.4, or 11.6 or termination of the Licensing Program pursuant to Section 11.5, Sangamo will accept assignment of Technology Licenses provided:

- (a) The only obligations pertain to Manufacturing and supplying ZFP Products;
- (b) The Technology License limits the supply obligation to reasonable quantities and timing; and
- (c) The Technology License provides that Sangamo will be reimbursed for costs and receive a financial return in the form of a product royalty.

## **ARTICLE 12**

### **REPRESENTATIONS, WARRANTIES, AND COVENANTS**

**12.1 Mutual Authority.** Sangamo and DAS each represents and warrants to the other that: (i) it has the authority and right to enter into and perform this Agreement, (ii) this Agreement is a legal and valid obligation binding upon it and is enforceable in accordance with

its terms, subject to applicable limitations on such enforcement based on bankruptcy laws and other debtors' rights, and (iii) its execution, delivery and performance of this Agreement will not conflict in any material fashion with the terms of any other agreement or instrument to which it is or becomes a party or by which it is or becomes bound, nor violate any law or regulation of any court, governmental body or administrative or other agency having authority over it.

**12.2 Performance by Affiliates.** The Parties recognize that each may perform some or all of its obligations under this Agreement through Affiliates, provided, however, that each Party shall remain responsible and be guarantor of the performance by its Affiliates and shall cause its Affiliates to comply with the provisions of this Agreement in connection with such performance. In particular, if any Affiliate of a Party participates in the Research Program, the Licensing Program, or otherwise in connection with a Party's obligations under this Agreement, (i) the restrictions of this Agreement which apply to the activities of a Party under this Agreement shall apply equally to the activities of such Affiliate, and (ii) the Party affiliated with such Affiliate shall assure, and hereby guarantees, that any intellectual property developed by such Affiliate shall be governed by the provisions of this Agreement (and subject to the licenses set forth in Article 2) as if such intellectual property had been developed by the Party.

**12.3 Third Party Rights.** Except as already disclosed, each Party represents and warrants to the other Party that, to its knowledge as of the Effective Date, its performance of work under the Collaboration as contemplated by this Agreement will not infringe the patent, trade secret or other intellectual property rights of any Third Party.

**12.4 Notice of Infringement or Misappropriation.** Each Party represents and warrants to the other Party that, as of the Effective Date, it has no knowledge of infringement or misappropriation of any alleged rights asserted by any Third Party in relation to any technology to be used in connection with the Collaboration.

**12.5 Additional Representations, Warranties and Covenants of Sangamo.**

**(a) Sangamo Know-How.** With respect to the following technology developed by Sangamo, solely to the extent that it constitutes Sangamo Know-How (it being understood that such technology also includes inventions for which patents are pending or

issued):

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**(b)** Sangamo represents and warrants with respect to those items below that pertain to current facts, and covenants with respect to those items below that pertain to future actions:

**(i)** that Sangamo has the full right and power to grant to DAS the licenses under such Sangamo Know-How that are granted in Section 2.1 of this Agreement;

**(ii)** that such Sangamo Know-How is proprietary to Sangamo, and the conception and development of such Sangamo Know-How by Sangamo has not, to the knowledge of Sangamo as of the Effective Date, constituted or involved the misappropriation of trade secrets of any Third Party;

**(iii)** that Sangamo has taken commercially reasonable steps to protect those items within such Sangamo Know-How that Sangamo has decided to maintain as trade secrets, and will continue to take commercially reasonable steps to protect those items within such Sangamo Know-How that Sangamo decides to maintain as trade secrets (it being understood that Sangamo may periodically re-evaluate the value of maintaining such items as trade secrets as opposed to pursuing patent protection therefor or permitting strategic disclosure thereof);

**(iv)** that as of the Effective Date, Sangamo is not aware of any additional trade secrets or know-how owned by Sangamo as of the Effective Date that are

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\*\*\* Certain information on this page has been omitted and filed separately with the Commission pursuant to a request for Confidential Treatment.

necessary for the design of ZFP Products for use in the Field, and if Sangamo subsequently discovers such additional trade secrets or know-how, their existence will be disclosed to DAS;

(v) that if additional trade secrets or know-how that are reasonably necessary or useful for the design of ZFP Products for use in the Field are developed by Sangamo during the Research Term and Sangamo Controls such additional trade secrets or know-how, their existence will be disclosed to DAS;

(vi) that the Sangamo Know-How that is reasonably necessary or useful for the design of ZFP Products for use in the Field will be fully disclosed to DAS pursuant to Section 7.2, it being the intent that DAS will be as enabled as Sangamo to design and develop ZFP Products for use in the Field;

(vii) that such Sangamo Know-How can be used to design ZFP Products for use in the Field without infringing any patent or proprietary right (other than one licensed hereunder) of any Third Party;

(viii) that such Sangamo Know-How together with technology disclosed in Sangamo Patents constitute all Sangamo Technology used by Sangamo during the Research Term for the design of ZFP Products for use in the Field.

(c) **Sangamo Patents.** With respect to the Sangamo Patents that are owned by Sangamo, Sangamo represents and warrants with respect to those items below that pertain to current facts, and covenants with respect to those items below that pertain to future actions:

(i) that it has the right to grant to DAS the licenses under the Sangamo Patents that are granted in Section 2.1 of this Agreement;

(ii) that it is not aware, as of the Effective Date, of any written assertions of invalidity of those Sangamo Patents that issued prior to the Effective Date, other than the opposition to\*\*\*;

(iii) that, as of the Effective Date, it has not withheld any material

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\*\*\* Certain information on this page has been omitted and filed separately with the Commission pursuant to a request for Confidential Treatment.

references during prosecution in the United States of those United States Sangamo Patents that issued prior to the Effective Date;

(iv) that the conception, development, and reduction to practice of the inventions claimed in the Sangamo Patents has not, to the knowledge of Sangamo as of the Effective Date, constituted or involved the misappropriation or infringement of trade secrets or other intellectual property of any Third Party;

(v) that, to the knowledge of Sangamo as of the Effective Date, there are no claims, judgments, or settlements relating to the Sangamo Patents to be paid by Sangamo;

(vi) that, to the knowledge of Sangamo as of the Effective Date, no pending claim has been brought by any person or entity alleging that the Sangamo Patents conflict or interfere with any intellectual property or proprietary right of any Third Party;

(vii) that Sangamo is not aware, as of the Effective Date, of any infringement of the Sangamo Patents by a Third Party, other than those disclosed to DAS in response to its Due Diligence Requests.

**(d) Third Party Licenses.** With respect to the Third Party Licenses set forth in Exhibit C as of the Effective Date, Sangamo represents and warrants with respect to those items below that pertain to current facts, and covenants with respect to those items below that pertain to future actions:

(i) that, to its knowledge as of the Effective Date, it is not in material breach of its obligations thereunder as of the Effective Date and it will continue to perform all of its obligations thereunder that, if not performed, would have a material adverse effect on DAS's rights under this Agreement,

(ii) that if it is unable to fulfill such obligations at any time, it will notify DAS as soon as practicable;

(iii) that it will not voluntarily terminate any Third Party License without the consent of DAS, such consent not to be unreasonably withheld, and it will use commercially reasonable efforts to cure any material breach of any Third Party License during

the life of this Agreement;

(iv) that Sangamo has the right to grant the sublicenses thereunder to DAS that are granted in Section 2.1 of this Agreement;

(v) that, if DAS cannot grant further sublicenses under a particular Third Party License, then at DAS's request in conjunction with DAS's entry into a Technology License, Sangamo will grant a sublicense (within 30 days) under such Third Party License to the Sublicensee for such Technology License on terms that are consistent with such Technology License and Sections 2.1(a)(iii), 2.1(c), 2.6, 8.11 and Exhibit D of this Agreement and that do not provide Sangamo with greater compensation than it would have received had such sublicense been granted by DAS pursuant to such Technology License;

(vi) that the conception, development, and reduction to practice of the technology licensed in the Field under Third Party Licenses is not known by Sangamo as of the Effective Date to have constituted or involved the misappropriation or infringement of trade secrets or other intellectual property of any Third Party;

**12.6 Future Discussion.** On written request by DAS, Sangamo will discuss with DAS an appropriate accommodation (which may involve a reduction in certain future payments owed to Sangamo under this Agreement) to reflect the reduced commercial value of the licenses granted to DAS under this Agreement as a result of:

(a) failure of Sangamo to consent to DAS's request, pursuant to Section 9.6(b)(ii), to have the right to attempt to resolve serious and sustained Infringement of Core Patents after Sangamo's failure to resolve such Infringement or initiate or defend a suit with respect thereto within one hundred twenty (120) days of the notice set forth in Section 9.6(a), wherein such Infringement has a material adverse effect on DAS's rights under this Agreement;

(b) activity in the Field by unlicensed Third Parties that does not constitute Infringement and that has a material adverse effect on DAS's ability to enter into Technology Licenses; or

(c) issuance of a Necessary Claim, where "Necessary Claim" means a claim

of an issued United States patent with a patent issuance date after the Effective Date that (i) is not owned, controlled or licensed by Sangamo within six (6) months of such patent issuance date and (ii) is necessarily infringed by DAS's activities in the Field, wherein a patent claim is necessarily infringed when no technically and commercially reasonable non-infringing alternative for practicing activities within the Field exists or can be developed, and DAS's inability to practice such activities without infringement has a material adverse effect on DAS's rights under this Agreement.

(d) If the Parties cannot agree on applicability of this Section 12.6, or on the appropriate accommodation, the dispute will be referred, upon written notice by either Party, to the CEOs. Within twenty (20) days after such notice, the CEOs shall meet for attempted resolution by good faith negotiations. If the CEOs are unable to resolve such dispute within thirty (30) days of their first meeting for such negotiations, then either Party may seek to have such dispute finally settled by a single arbitrator under the rules of the American Arbitration Association applicable to expedited arbitrations.

## ARTICLE 13

### INDEMNIFICATION

**13.1 Mutual Indemnification.** Subject to Section 13.3, each Party hereby agrees to indemnify, defend and hold the other Party, its Affiliates, its licensees, and its and their officers, directors, employees, consultants, contractors, sublicensees and agents (collectively, the "Indemnitees") harmless from and against any and all damages or other amounts payable to a Third Party claimant, as well as any reasonable attorneys' fees and costs of litigation incurred by such Indemnitee as to any such Claim (as defined in this Section 13.1) until the indemnifying Party has acknowledged that it will provide indemnification hereunder with respect to such Claim as provided below (collectively, "Damages") resulting from claims, suits, proceedings or causes of action ("Claims") brought by such Third Party against such Indemnitee based on: (a) a breach of warranty by the indemnifying Party contained in this Agreement; (b) breach of this Agreement or applicable law by such indemnifying Party; (c) negligence or willful misconduct



of a Party, its Affiliates or (sub)licensees, or their respective employees, contractors or agents in the performance of this Agreement; and/or (d) breach of a contractual or fiduciary obligation owed by it to a Third Party (including without limitation misappropriation of trade secrets).

**13.2 Additional Indemnification by DAS.** Subject to Section 13.3, DAS hereby agrees to indemnify, defend and hold harmless Sangamo and its directors, agents and employees from and against any and all suits, claims, actions, demands, liabilities, expenses and/or loss, including reasonable legal expenses and reasonable attorneys' fees ("Losses") resulting directly or indirectly from (a) the manufacture, use, handling, storage, marketing, sale or other disposition of DAS Products or Licensed Products by DAS, its Affiliates, agents or sublicensees (including Sublicensees); and (b) the manufacture, use, handling, storage, marketing, sale or other disposition of ZFP Products by DAS or its Affiliates or agents. Such indemnity obligation shall not apply to the extent such Losses result from (a) a breach of warranty by Sangamo contained in this Agreement; (b) breach of this Agreement or applicable law by Sangamo; (c) negligence or willful misconduct by Sangamo, its Affiliates or (sub)licensees, or their respective employees, contractors or agents in the performance of this Agreement; and/or (d) breach of a contractual or fiduciary obligation owed by Sangamo to a Third Party (including without limitation misappropriation of trade secrets).

**13.3 Conditions to Indemnification.** As used herein, "Indemnitee" shall mean a party entitled to indemnification under the terms of Section 13.1 or 13.2. It shall be a condition precedent to an Indemnitee's right to seek indemnification under such Section 13.1 or 13.2:

(a) shall inform the indemnifying Party under such applicable Section of a Claim as soon as reasonably practicable after it receives notice of the Claim;

(b) shall, if the indemnifying Party acknowledges that such Claim falls within the scope of its indemnification obligations hereunder, permit the indemnifying Party to assume direction and control of the defense, litigation, settlement, appeal or other disposition of the Claim (including the right to settle the claim solely for monetary consideration); provided, that the indemnifying Party shall seek the prior written consent (not to be unreasonably withheld or delayed) of any such Indemnitee as to any settlement which would materially diminish or materially adversely affect the scope, exclusivity or duration of any Patents licensed under this

Agreement, would require any payment by such Indemnitee, would require an admission of legal wrongdoing in any way on the part of an Indemnitee, or would effect an amendment of this Agreement; and

(c) shall fully cooperate (including providing access to and copies of pertinent records and making available for testimony relevant individuals subject to its control) as reasonably requested by, and at the expense of, the indemnifying Party in the defense of the Claim.

Provided that an Indemnitee has complied with the foregoing, the indemnifying Party shall provide attorneys reasonably acceptable to the Indemnitee to defend against any such Claim. Subject to the foregoing, an Indemnitee may participate in any proceedings involving such Claim using attorneys of its/his/her choice and at its/his/her expense. In no event may an Indemnitee settle or compromise any Claim for which it/he/she intends to seek indemnification from the indemnifying Party hereunder without the prior written consent of the indemnifying Party, or the indemnification provided under such Section 13.1 or 13.2 as to such Claim shall be null and void.

**13.4 Limitation of Liability.** EXCEPT FOR AMOUNTS PAYABLE TO THIRD PARTIES BY A PARTY FOR WHICH IT SEEKS REIMBURSEMENT OR INDEMNIFICATION PROTECTION FROM THE OTHER PARTY PURSUANT TO SECTIONS 13.1 AND 13.2, AND EXCEPT FOR BREACH OF SECTION 10.1 HEREOF, IN NO EVENT SHALL EITHER PARTY, ITS DIRECTORS, OFFICERS, EMPLOYEES, AGENTS OR AFFILIATES BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON A CLAIM OR ACTION OF CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER TORT, OR OTHERWISE, ARISING OUT OF THIS AGREEMENT, UNLESS SUCH DAMAGES ARE DUE TO THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE LIABLE PARTY. For clarification, the foregoing sentence shall not be interpreted to limit or to expand the express rights specifically granted in the sections of this Agreement.

**13.5 Collaboration Disclaimer.** EXCEPT AS PROVIDED IN ARTICLE 12

ABOVE, DAS EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES WITH RESPECT TO ANY RESEARCH RESULTS, DATA, OR INVENTIONS (AND ANY PATENT RIGHTS OBTAINED THEREON) IDENTIFIED, MADE OR GENERATED BY DAS AS PART OF THE COLLABORATION OR OTHERWISE MADE AVAILABLE TO SANGAMO PURSUANT TO THE TERMS OF THIS AGREEMENT. EXCEPT AS PROVIDED IN ARTICLE 12 ABOVE, SANGAMO EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES WITH RESPECT TO ANY RESEARCH RESULTS, ZFP PRODUCTS, DATA, OR INVENTIONS (AND ANY PATENT RIGHTS OBTAINED THEREON) IDENTIFIED, MADE OR GENERATED BY SANGAMO AS PART OF THE COLLABORATION OR OTHERWISE MADE AVAILABLE TO DAS PURSUANT TO THE TERMS OF THIS AGREEMENT.

**ARTICLE 14**  
**MISCELLANEOUS**

**14.1 Dispute Resolution.** In the event of any controversy or claim arising out of, relating to or in connection with any provision of this Agreement, other than a dispute addressed in Section 12.6(d) or 14.3 or issues unresolved by the JSC that are submitted for resolution as provided in Section 3.5(d), the Parties shall try to settle their differences amicably between themselves first, by referring the disputed matter to the Senior Vice President of Business Development of Sangamo and the Vice President of Research of DAS (or if either foregoing position does not exist at such time, the closest successor in title to such position) (the "Representatives") and, if not resolved by such Representatives, by referring the disputed matter to the CEOs of the Parties or their designees. Either Party may initiate such informal dispute

resolution by sending written notice of the dispute to the other Party, and, within twenty (20) days after such notice, the Representatives shall meet for attempted resolution by good faith negotiations. If the Representatives are unable to resolve such dispute within thirty (30) days of their first meeting for such negotiations, then the CEOs shall meet within twenty (20) days thereafter for attempted resolution by good faith negotiations. If the CEOs are unable to resolve such dispute within thirty (30) days of their first meeting for such negotiations, either Party may seek to have such dispute resolved in any United States federal or state court of competent jurisdiction and appropriate venue. To the extent permitted by law, the Party that seeks such judicial resolution hereby consents to the other Party's forum of choice, provided the choice is limited to California, Indiana, or Delaware.

**14.2 Governing Law.** Resolution of all disputes arising out of or related to this Agreement or the performance, enforcement, breach or termination of this Agreement and any remedies relating thereto, shall be governed by and construed under the substantive laws of the State of Delaware, as applied to agreements executed and performed entirely in the State of California by residents of the State of Delaware, without regard to conflicts of law rules that would cause the application of the laws of another jurisdiction.

**14.3 Patents and Trademarks.** Any dispute, controversy or claim relating to the scope, validity, enforceability or infringement of any patents or trademark rights shall be submitted to a court of competent jurisdiction in the territory in which such patents or trademark rights were granted or arose.

**14.4 Entire Agreement; Amendment.** This Agreement set forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto and supersedes and terminates all prior agreements and understandings between the Parties. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties other than as are set forth herein and therein. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

**14.5 Export Control.** This Agreement is made subject to any restrictions concerning

the export of products or technical information from the United States of America or other countries which may be imposed upon or related to Sangamo or DAS from time to time. Each Party agrees that it will not export, directly or indirectly, any technical information acquired from the other Party under this Agreement or any products using such technical information to a location or in a manner that at the time of export requires an export license or other governmental approval, without first obtaining the written consent to do so from the appropriate agency or other governmental entity.

#### **14.6 Bankruptcy**

(a) All rights and licenses granted under or pursuant to this Agreement, including amendments hereto, by each Party to the other Party are, for all purposes of Section 365(n) of Title 11 of the United States Code (“Title 11”), licenses of rights to intellectual property as defined in Title 11. Each Party agrees during the term of this Agreement to create and maintain current copies or, if not amenable to copying, detailed descriptions or other appropriate embodiments, to the extent feasible, of all such intellectual property. If a case is commenced by or against either Party (the “Bankrupt Party”) under Title 11, then, unless and until this Agreement is rejected as provided in Title 11, the Bankrupt Party (in any capacity, including debtor-in-possession) and its successors and assigns (including, without limitation, a Title 11 Trustee) shall, at the election of the Bankrupt Party made within sixty (60) days after the commencement of the case (or, if no such election is made, immediately upon the request of the non-Bankrupt Party) either (i) perform all of the obligations provided in this Agreement to be performed by the Bankrupt Party including, where applicable and without limitation, providing to the non-Bankrupt Party portions of such intellectual property (including embodiments thereof) held by the Bankrupt Party and such successors and assigns or otherwise available to them or (ii) provide to the non-Bankrupt Party all such intellectual property (including all embodiments thereof) held by the Bankrupt Party and such successors and assigns or otherwise available to them.

(b) If a Title 11 case is commenced by or against the Bankrupt Party and this Agreement is rejected as provided in Title 11 and the non-Bankrupt Party elects to retain its rights hereunder as provided in Title 11, then the Bankrupt Party (in any capacity, including

debtor-in-possession) and its successors and assigns (including, without limitations, a Title 11 Trustee) shall provide to the non-Bankrupt Party all such intellectual property (including all embodiments thereof) held by the Bankrupt Party and such successors and assigns or otherwise available to them immediately upon the non-Bankrupt Party's written request therefor. Whenever the Bankrupt Party or any of its successors or assigns provides to the non-Bankrupt Party any of the intellectual property licensed hereunder (or any embodiment thereof) pursuant to this Section 14.6, the non-Bankrupt Party shall have the right to perform the obligations of the Bankrupt Party hereunder with respect to such intellectual property, but neither such provision nor such performance by the non-Bankrupt Party shall release the Bankrupt Party from any such obligation or liability for failing to perform it.

(c) All rights, powers and remedies of the non-Bankrupt Party provided herein are in addition to and not in substitution for any and all other rights, powers and remedies now or hereafter existing at law or in equity (including, without limitation, Title 11) in the event of the commencement of a Title 11 case by or against the Bankrupt Party. The non-Bankrupt Party, in addition to the rights, power and remedies expressly provided herein, shall be entitled to exercise all other such rights and powers and resort to all other such remedies as may now or hereafter exist at law or in equity (including, without limitation, under Title 11) in such event. The Parties agree that they intend the foregoing non-Bankrupt Party rights to extend to the maximum extent permitted by law and any provisions of applicable contracts with Third Parties, including without limitation for purposes of Title 11, (i) the right of access to any intellectual property (including all embodiments thereof) of the Bankrupt Party or any Third Party with whom the Bankrupt Party contracts to perform an obligation of the Bankrupt Party under this Agreement, and, in the case of the Third Party, which is necessary for the development, registration and manufacture of Licensed Products and (ii) the right to contract directly with any Third Party described in (i) in this sentence to complete the contracted work. Any intellectual property provided pursuant to the provisions of this Section 14.6 shall be subject to the licenses set forth elsewhere in this Agreement and the payment obligations of this Agreement, which shall be deemed to be royalties for purposes of Title 11.

**14.7 Force Majeure.** Both Parties shall be excused from the performance of their obligations under this Agreement to the extent that such performance is prevented by force



**14.10 United States Dollars.** References in this Agreement to “dollars” or “\$” shall mean the legal tender of the United States of America.

**14.11 No Strict Construction.** This Agreement has been prepared jointly and shall not be strictly construed against either Party. Ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision.

**14.12 Assignment.** Neither Party may assign or transfer this Agreement or any rights or obligations hereunder without the prior written consent of the other, except a Party may make such an assignment without the other Party’s consent to an Affiliate or to a Third Party successor to substantially all of the business of such Party to which this Agreement relates, whether in a merger, sale of stock, sale of assets or other transaction; provided that any such permitted successor or assignee of rights and/or obligations hereunder is obligated, by reason of operation of law or pursuant to a written agreement with the other Party, to assume performance of this Agreement or such rights and/or obligations; and provided, further, that if assigned to an Affiliate, the assigning Party shall remain jointly and severally responsible for the performance of this Agreement by such Affiliate. Any permitted assignment shall be binding on the successors of the assigning Party. Any assignment or attempted assignment by either Party in violation of the terms of this Section 14.12 shall be null and void and of no legal effect.

**14.13 Electronic Data Interchange.** If both Parties elect to facilitate business activities hereunder by electronically sending and receiving data in agreed formats (also referred to as Electronic Data Interchange or “EDI”) in substitution for conventional paper-based documents, the terms and conditions of this Agreement shall apply to such EDI activities.

**14.14 Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

**14.15 Further Actions.** Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.



**14.16 Severability.** If any one or more of the provisions of this Agreement is held to be invalid or unenforceable by any court of competent jurisdiction from which no appeal can be or is taken, the provision shall be considered severed from this Agreement and shall not serve to invalidate any remaining provisions hereof. The Parties shall make a good faith effort to replace any invalid or unenforceable provision with a valid and enforceable one such that the objectives contemplated by the Parties when entering this Agreement may be realized.

**14.17 Headings.** The headings for each article and section in this Agreement have been inserted for convenience of reference only and are not intended to limit or expand on the meaning of the language contained in the particular article or section.

**14.18 No Waiver.** Any delay in enforcing a Party's rights under this Agreement or any waiver as to a particular default or other matter shall not constitute a waiver of such Party's rights to the future enforcement of its rights under this Agreement, excepting only as to an express written and signed waiver as to a particular matter for a particular period of time.

[Rest of Page Intentionally Left Blank]

**In Witness Whereof**, the Parties have executed this Research and Commercial License Option Agreement in duplicate originals by their proper officers as of the date and year first above written.

**Sangamo BioSciences, Inc.**

**Dow AgroSciences LLC**

By: /s/ Edward Lanphier

By: /s/ Daniel R. Kittle

Title: President and CEO

Title: Vice President, Research and Development

**Exhibit A**  
**Sangamo Patents**

**Title: \*\*\***

**Inventor: \*\*\***

**Owner: \*\*\***

**Chain of Title: \*\*\***

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\*\*\* Certain information on this page has been omitted and filed separately with the Commission pursuant to a request for Confidential Treatment.

**Exhibit B**  
**Core Patents**

**Title:** \*\*\*

**Inventor:** \*\*\*

**Owner:** \*\*\*

**Chain of Title:** \*\*\*

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\*\*\* Certain information on this page has been omitted and filed separately with the Commission pursuant to a request for Confidential Treatment.

**Exhibit C**

**Third Party Licenses**

Patent License Agreement by and between \*\*\* and Sangamo Biosciences, Inc. dated \*\*\* and amended\*\*\*,\*\*\*; and \*\*\* (the “\*\*\*Agreement”).

License Agreement by and between \*\*\*and Sangamo Biosciences, Inc. dated \*\*\* and amended \*\*\* (the “\*\*\*Agreement”).

License Agreement by and between \*\*\* and Sangamo Biosciences, Inc. dated \*\*\*and amended \*\*\*and \*\*\* (the “\*\*\*Agreement”).

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**Exhibit D**

**Certain Terms of Third Party Licenses**

DAS hereby agrees to comply, and to cause its applicable sublicensees to comply, with the following referenced provisions of the \*\*\* Agreement: Articles 2, 5, 7, 8, 9, 10, 12, 13 and 15. Such provisions are hereby incorporated by reference into this Agreement and are binding upon DAS and such sublicensees as if they were parties to the \*\*\* Agreement.

DAS hereby agrees to comply, and to cause its applicable sublicensees to comply, with the following referenced provisions of the \*\*\* Agreement: Articles II, VIII, IX, X, XIII and XV and Paragraphs 5.1 and 5.2. A copy of such provisions is attached to this Agreement as Exhibit F, and such provisions and are binding upon DAS and such sublicensees as if they were parties to the \*\*\* Agreement.

DAS hereby agrees to comply with the following referenced provisions of the \*\*\* Agreement: Sections 7.7 and 8.4 and Article 12. Such provisions and are binding upon DAS as if it were a party to the \*\*\* Agreement. DAS hereby acknowledges that, pursuant to Section 2.3 of the \*\*\* Agreement, DAS does not have the right to grant sublicenses under the intellectual property licensed to Sangamo pursuant to the \*\*\* Agreement.

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**Exhibit E**  
**Press Release**

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**Exhibit F**

**Copy of Selected Provisions of \*\*\* Agreement**

ARTICLE II – GRANT

2.1 \*\*\* hereby grants to LICENSEE the exclusive worldwide right and license to make, have made, use, lease and sell the Licensed Products, and to practice the Licensed Processes, including the right to grant sublicenses, subject to 35USC200-211 and the regulations promulgated thereunder, to the end of the term for which the Patent Rights are granted by the applicable governmental authority, unless sooner terminated as hereinafter provided (the “Term”). \*\*\* reserves the non-transferable royalty-free right to practice the subject matter of any claim within the Patent Rights for its own internal purposes. If \*\*\* leaves \*\*\*, he shall have the non-transferable, royalty-free right to practice any claim within the Patent Rights for his own academic purposes.

2.2 In order to establish a period of exclusivity for LICENSEE, \*\*\* hereby agrees that it shall not grant any other license to make, have made, use, lease or sell Licensed Products or to practice Licensed Processes except for its internal research activities during the period of time (the “Exclusive Period”) commencing with the Effective Date of this Agreement and terminating with expiration of the last-to-expire patent licensed under this Agreement, unless converted earlier to a nonexclusive license pursuant to Paragraph 4.4 hereof or pursuant to a requirement by the United States Government in accordance with 35USC200-211.

2.3 LICENSEE shall have the right to sublicense all or any part of this license. LICENSEE agrees that any sublicenses granted by it shall provide that the obligations to \*\*\* of Articles II, VIII, IX, X, XIII, XV, and Paragraphs 5.1 and 5.2 of this Agreement shall be binding upon the sublicensees as if it were a party to this Agreement. LICENSEE further agrees to attach copies of these Articles to sublicense agreements.

2.4 LICENSEE agrees to forward to \*\*\* a copy of any and all fully executed sublicense agreements, and further agrees to forward to \*\*\*, quarterly, pursuant to Paragraph 5.2 a copy of such reports received by LICENSEE from its sublicensees during the preceding twelve (12) month period under the sublicenses as shall be pertinent to a royalty accounting under said sublicense agreements.

2.5 Subject to Sections 2.6, 2.7 and 15.7 below, the license granted hereunder shall not be construed to confer any rights upon LICENSEE by implication, estoppel or otherwise as to any technology not specifically set forth in Appendix A, Appendix B, Appendix C, and Appendix D hereof.

2.6 \*\*\* hereby also grants to LICENSEE a right of first negotiation at then commercially reasonable terms, to obtain an exclusive license to any Inventions, as previously defined, developed during the term of this Agreement and any extension thereof and pursuant to

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\*\*\* Certain information on this page has been omitted and filed separately with the Commission pursuant to a request for Confidential Treatment.



any Research Agreement between the parties hereto (Appendix D). \*\*\* shall promptly give LICENSEE written notice of any such Inventions, as defined, and LICENSEE shall have one hundred and twenty (120) days from the date of receipt of such notice to give \*\*\* written notice of its intent to exercise such option and complete negotiations. \*\*\* shall not negotiate with any third party regarding these Inventions during the period of LICENSEE'S right to negotiate. During the term of this Agreement and any extension thereof, \*\*\* shall be free to pursue any scientific investigations of his choice through collaboration with colleagues. Should any such collaboration involve a Licensed Product or Licensed Process, \*\*\* will take the initiative of promptly communicating with these colleagues for the purpose of using its reasonable best efforts to have such colleagues agree to be bound by the terms of this Agreement with regard to Licensed Products and Licensed Processes.

2.7 Appendix B attached hereto contains ideas conceived by \*\*\* for developing laboratory reagents, diagnostics, and pharmaceuticals relating to chimeric restriction endonucleases. \*\*\* shall give written notice of any Invention resulting under the Advanced Technology Program within sixty (60) days of the completion of the funding of such program. Any Invention resulting in whole or in part from said ideas which are made pursuant to an award under the Advanced Technology Program where a grant application was filed on March 29, 1995 (Appendix C) shall be assigned to LICENSEE pursuant to Section 15.7 below and \*\*\* will be named as sole inventor unless another individual makes a creative input to said Invention. LICENSEE shall have the first right of negotiation, under then commercially reasonable terms, to obtain an exclusive, royalty-bearing license under any Invention resulting from said ideas in Appendix B made by \*\*\* with funding from a source other than the Advanced Technology Program grant.

#### PARAGRAPHS 5.1 AND 5.2

5.1 LICENSEE shall keep full, true and accurate books of account containing all particulars that may be necessary for the purpose of showing the amounts payable to \*\*\* hereunder. Said books of account shall be kept at LICENSEE'S principal place of business or the principal place of business of the appropriate Division of LICENSEE to which this Agreement relates. Said books and the supporting data shall be open at all reasonable times for five (5) years following the end of the calendar year to which they pertain, to the inspection of \*\*\* or its agents for the purpose of verifying LICENSEE'S royalty statement or compliance in other respects with this Agreement.

5.2 Commencing with the first commercial sale of a Licensed Product, LICENSEE, within sixty (60) days after March 31, June 30, September 30 and December 31, of each year, shall deliver to \*\*\* true and accurate reports, giving such particulars of the business conducted by LICENSEE, its Subsidiaries and its sublicensees during the preceding three-month period under this Agreement as shall be pertinent to a royalty accounting hereunder. These shall include at least the following:

- (a) All Licensed Products manufactured and sold.

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- (b) Total billings for Licensed Products sold.
- (c) Accounting for all Licensed Processes used or sold.
- (d) Deductions applicable as provided in Paragraph 1.6.
- (e) Total royalties due.
- (f) Names and addresses of all sublicensees of LICENSEE.

Where reasonably practical, LICENSEE shall, to the best of its knowledge, subcategorize the Licensed Products sold so as to assign the royalties paid to individual patent(s) of Appendix A. Such subcategorization shall be for \*\*\* administrative purposes only and shall in no way affect any obligations of any part or the amounts of royalties to be paid under this Agreement. Until there has been a first commercial sale of a Licensed Product, the LICENSEE shall give an annual report of LICENSEE's efforts to achieve a first commercial sale.

#### ARTICLE VIII — LIABILITY

8.1 Inasmuch as \*\*\* will not, under the provisions of this Agreement or otherwise, have control over the manner in which LICENSEE, or its Subsidiaries or its agents or its sublicensees or those operating for its account, or third parties who purchase Licensed Products from any of the foregoing entities, practice any invention encompassed by the license granted herein, LICENSEE shall defend and hold \*\*\*, it trustees, officers, employees, students, and affiliates harmless as against any judgments, fees, expenses or other costs (including reasonable attorneys' fees) arising from or incidental to any product liability or other lawsuit brought as a consequence of the practice of said invention by any of the foregoing entities, whether or not \*\*\* is named as party defendant in any such lawsuit. LICENSEE shall have the right to defend such a product liability lawsuit with counsel of its own choosing and \*\*\* will cooperate in the defense of such action at LICENSEE's expense. Practice of the Invention encompassed by the license granted herein by a Subsidiary or an agent or a sublicensee, or a third party on behalf of or for the account of LICENSEE or by a third party who purchases Licensed Products from any of the foregoing shall be considered LICENSEE's practice of said invention for purposes of this Paragraph 8.1. The provisions of this Paragraph 8.1 shall survive termination of this Agreement.

8.2 LICENSEE shall maintain or cause to be maintained, prior to the first planned use of Licensed Products or Licensed Processes in humans, product liability insurance or other protection reasonably acceptable to \*\*\* which shall protect LICENSEE and \*\*\* in regard to events covered by Paragraph 8.1 above. LICENSEE will disclose to \*\*\* the amount and kind of product liability insurance it obtains, will give \*\*\* a copy of the certificate of insurance, and will increase or change the kind of insurance at the reasonable request of \*\*\*, provided such insurance is available to LICENSEE at commercially reasonable rates.

8.3 Except as otherwise expressly set forth in this Agreement, \*\*\* makes no representations and extend no warranties of any kind, either express or implied, including but not

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limited to warranties of merchantability, fitness for a particular purpose, and validity of Patent Rights claims, issued or pending.

8.4 No liability under this Agreement shall result to a party from delay in performance caused by force majeure, that is, circumstances beyond the reasonable control of the party affected thereby, including, without limitation, acts of God, earthquake, fire, flood, war, government regulations, labor unrest, or shortage of or an inability to obtain material or equipment.

#### ARTICLE IX — EXPORT CONTROLS

It is understood that \*\*\* is subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including the Arms Export Control Act, as amended and the Export Administration Act of 1979), and that their obligations hereunder are contingent on compliance with applicable United States export laws and regulations. The transfer of certain technical data and commodities may require a license from the cognizant agency of the United States Government and/or written assurances by LICENSEE that LICENSEE shall not export data or commodities to certain foreign countries without prior approval of such agency. \*\*\* neither represents that a license shall not be required nor that, if required, it shall be issued.

#### ARTICLE X — NON-USE OF NAMES

LICENSEE shall not use the name of \*\*\*, nor any of its employees, or any adaptation thereof, in any advertising, promotional or sales literature without prior written consent obtained from \*\*\* in each case, except that LICENSEE may state that it is licensed by \*\*\* under one or more of the patents and/or applications comprising the Patent Rights.

#### ARTICLE XIII — TERMINATION

13.1 This Agreement shall terminate if LICENSEE dissolves, unless this Agreement has been assigned prior to the date of dissolution.

13.2 Should LICENSEE fail to pay \*\*\* royalties due and payable hereunder, \*\*\* shall have the right to terminate this Agreement on sixty (60) days' written notice, unless LICENSEE shall pay \*\*\* within the sixty (60) day period, all such royalties and interest due and payable. Upon the expiration of the sixty (60) day period, if LICENSEE shall not have paid all such royalties and interest due and payable, the rights, privileges and license granted hereunder shall terminate.

13.3 Upon any material breach or default of this Agreement by LICENSEE other than those occurrences set out in Paragraphs 13.1 and 13.2 hereinabove, which shall always take precedence in that order over any material breach or default referred to in this Paragraph 13.3, \*\*\* shall have the right to terminate this Agreement and the rights, privileges and license granted hereunder by giving ninety (90) days' notice to LICENSEE. Such termination shall become

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effective unless LICENSEE shall have cured any such breach or default prior to the expiration of the ninety (90) day period.

13.4 LICENSEE shall have the right to terminate this Agreement at any time on six (6) months' notice to \*\*\* and upon payment of all amounts due\*\*\*.

13.5 Upon termination of this Agreement for any reason, nothing herein shall be construed to release either party from any obligation that matured prior to the effective date of such termination. LICENSEE and any Subsidiary and sublicensee thereof may, however, after the effective date of such termination, sell all Licensed Products, and complete Licensed Products in the process of manufacture at the time of such termination and sell the same, provided that LICENSEE shall pay to \*\*\* the royalties thereon as required by Article IV of this Agreement and shall submit the reports required by Article V hereof on the sales of Licensed Products.

13.6 Upon termination of this Agreement for any reason during the Exclusive Period, any sublicensee not then in default shall have the right to seek a license from \*\*\* under the same terms and conditions as set forth hereunder.

13.7 The provisions of Paragraph 8.1, Article IX and Article X, Paragraph 4.5 and Paragraph 6.6, shall survive termination of this Agreement. (as amended on June 1, 1998)

#### ARTICLE XV — MISCELLANEOUS PROVISIONS

15.1 This Agreement shall be construed, governed, interpreted and applied in accordance with the laws of the State of Maryland, U.S.A., except that questions affecting the validity, construction and effect of any patent licensed hereunder, shall be determined by the law of the country in which the patent was granted.

15.2 The parties hereto acknowledge that this Agreement sets forth the entire Agreement and understanding of the parties hereto as to the subject matter hereof, and shall not be subject to any change or modification except by the execution of a written instrument subscribed to by the parties hereto.

15.3 The provisions of this Agreement are severable, and in the event that any provisions of this Agreement shall be determined to be invalid or unenforceable under any controlling body of the law, such invalidity or unenforceability shall not in any way affect the validity or enforceability of the remaining provisions hereof.

15.4 LICENSEE agrees to mark the Licensed Products sold in the United States with all applicable United States patent numbers. All Licensed Products shipped to or sold in other countries shall be marked in such a manner as to conform with the patent laws and practice of the country of manufacture or sale.

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15.5 The failure of any party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other party.

15.6 Claims, disputes, or controversies concerning the validity, construction, or effect of any patent licensed hereunder shall be resolved in any court having jurisdiction thereof.

15.7 A grant application under the Advanced Technology Program was filed on March 29, 1995 (Appendix C). If a grant is awarded, any Invention made pursuant thereto where an investigator at \*\*\* is the sole inventor or a coinventor shall be assigned to LICENSEE. Such Invention shall be assigned hereunder and shall thereafter fall within the definition of Patent Rights and therefore shall be subject to Sections 3.2, 3.3 and 3.4 hereof and to the royalty payments required by Sections 4.1(c)(i), 4.1(d) and 4.4 hereof as part of the rights licensed hereunder.

15.8 With respect to \*\*\* LICENSEE hereby acknowledges and agrees that \*\*\* is the sole inventor of this property. (as amended on June 1, 1998)

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\*\*\* Certain information on this page has been omitted and filed separately with the Commission pursuant to a request for Confidential Treatment.

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements (Form S-8 No. 333-34196 and 333-64642) and in the Registration Statements (Form S-3 No. 333-113062 and 333-68066) and in the related prospectuses of Sangamo BioSciences, Inc. of our reports dated March 13, 2006, with respect to (1) the consolidated financial statements of Sangamo BioSciences, Inc., and (2) management's assessment of the effectiveness of internal control over financial reporting and the effectiveness of internal control over financial reporting of Sangamo BioSciences, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2005.

/s/ ERNST & YOUNG LLP

Palo Alto, California  
March 13, 2006

## CHIEF EXECUTIVE OFFICER CERTIFICATE

I, Edward O. Lanphier II, certify that:

1. I have reviewed this annual report on Form 10-K of Sangamo BioSciences, Inc. (the "Registrant");
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 16, 2006

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

## PRINCIPAL FINANCIAL OFFICER CERTIFICATE

I, Greg S. Zante, certify that:

1. I have reviewed this annual report on Form 10-K of Sangamo BioSciences, Inc.
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 16, 2006

/s/ Greg S. Zante

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



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

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

- (1) the Annual Report of the Company on Form 10-K for the period ending December 31, 2004, as filed with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Edward O. Lanphier II

Edward O. Lanphier II  
President, Chief Executive Officer and Director  
(Principal Executive Officer)  
March 16, 2006

/s/ Greg S. Zante

Greg S. Zante  
Senior Director, Finance and Administration  
(Principal Financial and Accounting Officer)  
March 16, 2006