SANGAMO BIOSCIENCES, INC. 2000 ANNUAL REPORT

# Welcome to the Revolution

## Corporate Profile

Sangamo BioSciences (Nasdaq: SGMO) develops and markets novel transcription factors capable of regulating genes. The company's powerful Universal Gene Recognition™ technology enables the engineering of a particular class of transcription factors known as zinc finger DNA-binding proteins, or ZFPs. By engineering ZFPs so that they can recognize a specific gene, Sangamo has created ZFP transcription factors that can control gene expression, and consequently, cell function.

Sangamo is commercializing its technology for applications in pharmaceutical drug discovery, human therapeutics, plant agriculture, clinical diagnostics, and industrial biotechnology. Over 20 leading pharmaceutical and biotechnology companies have used Sangamo's Universal GeneTools™ to accelerate their understanding and control of gene function and their validation of new drug targets. In addition, Sangamo is working with Edwards Lifesciences Corporation to develop ZFP-based therapeutics for cardiovascular disease. Sangamo is also exploring novel treatments for clinical indications in cancer and infectious diseases.

### Forward-looking Disclaimer

Some statements contained in this Annual Report are forward-looking with respect to our operations, economic performance, and financial condition. Statements that are forward-looking in nature should be read with caution because they involve risks and uncertainties, they are included, for example, in specific and general discussions about: our strategy; sufficiency of our cash resources; revenues from existing and new collaborations; product development; our research and development and other expenses; our operational and legal risks; and our plans, objectives, expectations and intentions and any other statements that are not historical facts. Various terms and expressions similar to them are intended to identify these cautionary statements. These terms include: "anticipates," "believes," "can," "continues," "could," "estimates," "expects," "intends," "may," "plans," "potential," "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" in the Annual Report on Form 10-K. 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.

The genomics revolution has begun. One of the most eagerly awaited scientific milestones of our generation was achieved in the first year of the new millennium—the completion of the sequencing of the human genome. Complementing the discovery of the structure of DNA almost fifty years ago, this feat has fundamental implications for the future, enabling us to begin to understand and use human genetic information to transform the quality of our lives. This remarkable achievement is creating unprecedented opportunities for patients, physicians, and those of us engaged in the discovery and development of novel pharmaceutical therapies.

# The Revolution

The human genome has been mapped:

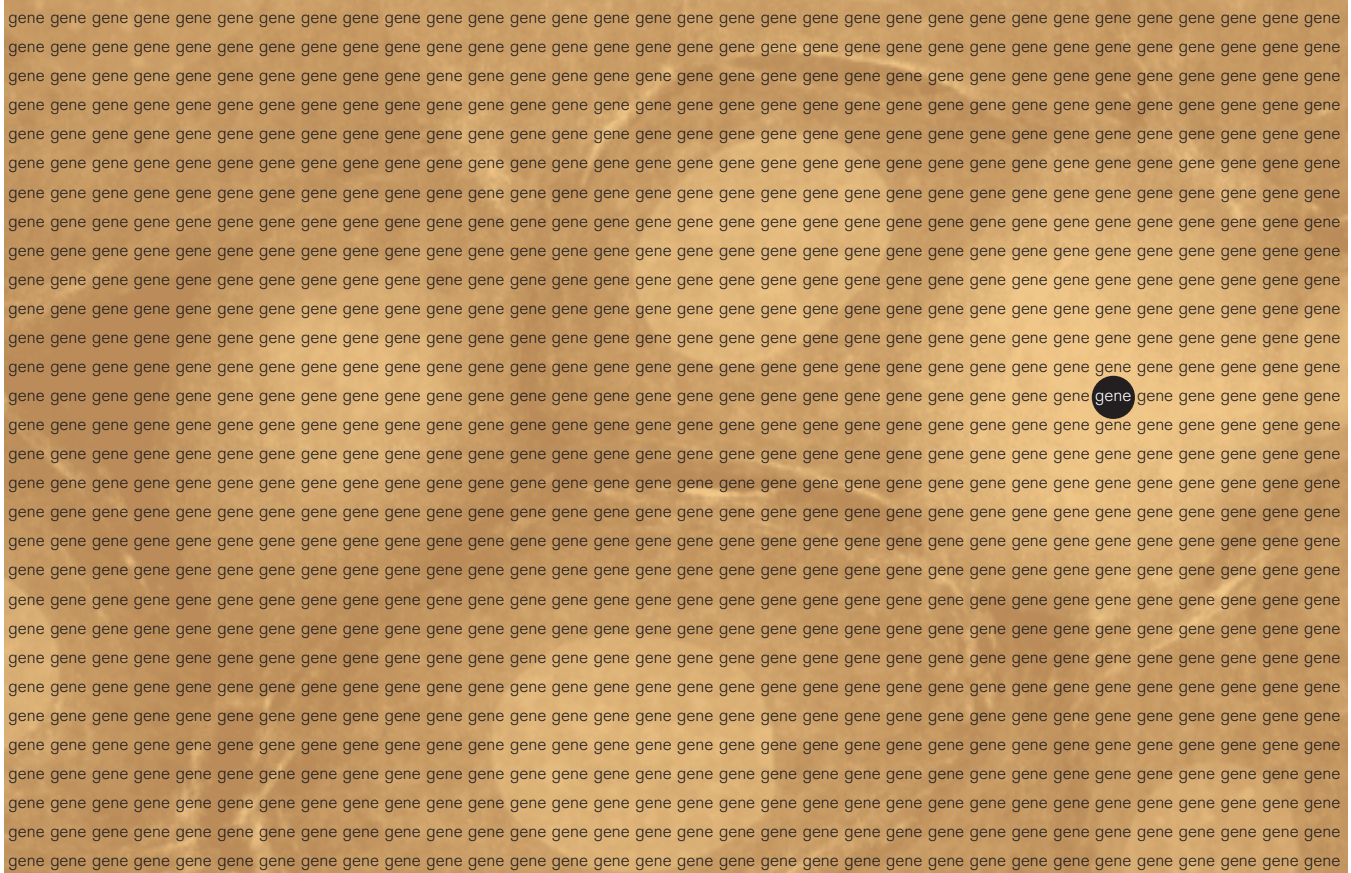
30,000 genes

3,000,000,000 base pairs

The revolution has begun. The sequencing of the human genome is now complete. Researchers estimate that approximately 30,000 genes make up the human genome, and three billion base pairs (A, T, G, and C) comprise the rungs of the DNA ladder.

Why is this important? Because DNA controls cellular processes. Knowledge about genes and their function should lead to better ways to diagnose, treat, and someday prevent or cure many disorders that elude treatment today. The promise of genomic medicine may lead to one of the biggest revolutions yet seen in human healthcare.

# The Challenge




The search for knowledge. The next step in the post-genomics era is to analyze and interpret the huge library of genomic data in an effort to turn raw sequence data into *knowledge* about which genes are implicated in disease processes. Scientists are working diligently to associate specific gene sequences with specific disorders and to discover the role of individual genes and their protein products in health and disease. This is a daunting task, not unlike the proverbial search for a needle in the haystack.

# The Opportunity

Sangamo's versatile proprietary platform can be used to:

**understand** gene function

**control** genes

**validate** gene targets

create novel **therapeutics**

What Sangamo does. Sangamo is working at the very center of this effort to analyze, understand, and control gene expression. Our platform involves engineering a special class of naturally occurring proteins, called zinc finger DNA-binding proteins (ZFPs), to regulate individual genes.

Why Sangamo's platform is attractive. Sangamo's ZFP technology is uniquely versatile and efficient for validating disease-related genes. Our technology, which can accelerate several steps of the target discovery and validation process, has been used by 22 pharmaceutical and biotechnology companies. These Universal GeneTools™ agreements underscore the need for powerful and proprietary gene regulation technology.

# The Strategy

Sangamo has signed collaborations with:

AstraZeneca plc

Bayer Corporation

Bristol-Myers Squibb Company

DuPont Pharmaceuticals Company

Edwards Lifesciences Corporation

Exelixis, Inc. /Artemis Pharmaceuticals GmbH

F. Hoffmann-LaRoche Ltd.

Genset SA

Glaxo Wellcome plc

Immunex Corporation

Japan Tobacco Inc.

Merck & Co., Inc.

Merck KGaA

Millennium Pharmaceuticals, Inc.

Pfizer Inc

Pharmacia & Upjohn Company

Procter & Gamble Pharmaceuticals, Inc.

Rosetta Inpharmatics

The R.W. Johnson Pharmaceutical Research Institute

Schering AG

SmithKline Beecham Pharmaceuticals

Warner-Lambert Company

Zaiya Incorporated

Expanding Universal GeneTools™. We put our technology in the hands of our collaborators and began generating product revenues only a few short years after the company was founded. As we continue to expand our Universal GeneTools™ business—both through new partners and repeat business with existing customers—we will also continue to investigate additional applications of our technology.

Opportunities in human therapeutics. The possibility of using ZFP transcription factors directly as human therapeutics creates enormous commercial potential for our technology. In addition, our ZFP transcription factors may be developed for product applications in plant agriculture, industrial biotechnology, and DNA diagnostics.

## HIGHLIGHTS OF 2000

- Completed initial public offering, raising $52 million
- Established strategic alliance with Edwards Lifesciences Corporation to develop novel treatments for cardiovascular disease
- Initiated six new Universal GeneTools™ collaborations with leading pharmaceutical and biotechnology companies, bringing the total number of collaborations to 22
- Filed 15 new U.S. patent applications and associated international filings related to ZFPs, chromatin, gene regulation, and the uses of the Universal Gene Recognition™ platform
- Named Alan Wolffe, Ph.D., as chief scientific officer and added approximately 30 scientists and research associates
- Increased annual revenues by over 50 percent
- Published gene regulation research by Sangamo scientists in the peer-reviewed *Journal of Biological Chemistry*
- Added two new board members — William Rutter, Ph.D., a co-founder of Chiron Corporation, and Jon Jacoby, a senior executive with Stephens Inc.

## OBJECTIVES FOR 2001

- Initiate two ZFP-Therapeutics™ collaborations
- Increase the number and scope of Universal GeneTools™ collaborations
- In the cardiovascular program, achieve preclinical results in a disease model
- Continue internal development of ZFP-Therapeutics™
- Establish a strategic collaboration in plant agriculture
- Publish scientific progress in peer-reviewed journals
- Expand intellectual property portfolio

# Letter from the CEO

Dear Fellow Stockholders:

The recent completion of the sequencing of the human genome marks the beginning of a new age of pharmaceutical discovery and development. While this represents a milestone for mankind, it is only the beginning of harnessing the value from this information. The next task is to unlock the secrets of the genome, of humans as well as other organisms, and to use this knowledge to improve the quality of our lives—from curing diseases that currently lack therapies to growing crops that resist disease and provide better nutrition. These advances will only come from success in deciphering the role of specific genes in health and disease. Part of this effort also involves understanding the immensely complex ways in which genes work together and how their activity is regulated. Sangamo's expertise lies at the very heart of this new research focus.

## BUILDING OUR TECHNOLOGY PLATFORM

Since Sangamo's inception in 1995, we have focused our efforts on establishing our technology platform as a uniquely powerful approach to understanding and controlling gene expression. Using a special type of naturally occurring proteins called zinc finger DNA-binding proteins (or ZFPs), we have been able to selectively regulate individual genes. During the past year, our ability to regulate gene function has been significantly enhanced as we have incorporated a more detailed understanding of how the intracellular environment influences the way ZFPs function. Our insights regarding chromatin, the structure in which DNA is packaged, have allowed us to more effectively access and regulate specific genes. As a result, we now have a more intricate grasp of the regulatory biology influencing the fundamental mechanisms of gene regulation. In addition to deepening our understanding of how genes are regulated, we have established the systems to apply this technology broadly and rapidly. To date we have demonstrated our ability to regulate endogenous genes from a number of different organisms, including human, mice, rats, plants, insects, and viruses.

Scientific interest in ZFPs is strong and growing. Helping to fuel this interest was the fall publication of Sangamo's research in the *Journal of Biological Chemistry* which highlighted our ability to target a specific human gene and regulate its expression within its natural chromosomal environment. This article was the first journal publication of our unique approach to targeted gene regulation. We expect similar publications in peer-reviewed journals as we continue to advance our science.

## EXPANDING UNIVERSAL GENETOOLS™ APPLICATIONS

The need for gene regulation technology has been evidenced by industry interest in our ZFP transcription factors. We have signed 22 Universal GeneTools™ agreements with pharmaceutical and biotechnology companies using ZFP transcription factors to accelerate the discovery and validation of new drug targets. This year we added six new collaborators, including: Procter & Gamble, Bristol-Myers Squibb, Johnson & Johnson, Merck & Co., Rosetta Inpharmatics, and Exelixis/Artemis Pharmaceuticals. These agreements reflect the opportunity in this market, as well as the potential importance and value of our technology.

In certain cases, our partners are utilizing ZFP transcription factors in cell-based systems to validate new drug targets—genes believed to play a direct role in the disease under study. Researchers also need to determine the effectiveness of potential drug candidates *in vivo*. Knock-out mouse models have historically been the most effective tool for performing this assessment. Sangamo is working with partners to produce better models, ones that can be made more quickly and that are capable of answering more sophisticated scientific questions about gene function.

Once a drug target has been validated, partners may want to use our technology to screen libraries of small molecule drug candidates. In this application, Sangamo scientists are creating cell lines that can either over-express or under-express the gene target. This should allow the pharmaceutical researcher to better assess and select new chemical entities as potential drug candidates.

## OPPORTUNITIES IN HUMAN THERAPEUTICS

The potential to use ZFP transcription factors as human therapeutics creates additional commercial opportunity for our technology. In our most advanced therapeutics program, being carried out in collaboration with Edwards Lifesciences Corporation, we are developing novel approaches for the treatment of cardiovascular disease. Progress in this program has been rapid, resulting in encouraging preliminary preclinical data within the first year of the collaboration. Given our progress over the past year, we will continue to move forward with the cardiovascular angiogenesis program, as well as to investigate other gene targets of relevance to cardiovascular diseases.

In addition to this collaborative effort in cardiovascular disease, Sangamo has its own initiatives underway in cancer and infectious diseases. To date we have seen encouraging results, including the specific ZFP-dependent repression and activation of clinically relevant gene targets in both of these major therapeutic areas. We believe that ZFP-Therapeutics™ will play an important role in the treatment of serious diseases for which no effective treatments currently exist.

## IMPLEMENTING THE BUSINESS MODEL

Our multi-tiered business model has generated near-term revenues while preserving long-term value. Our business model has allowed us to put our technology in the hands of our collaborators and begin recognizing revenues only a few short years after the company was founded. As we continue to expand our Universal GeneTools™ business — both through new customer relationships and repeat business with existing partners — we will also continue to investigate new applications of our technology. In addition to directly participating in the genomics and human therapeutics markets, our ZFP transcription factors may also be applied to plant agriculture, DNA diagnostics, and industrial biotechnology. We expect to monetize our technology assets in these latter markets in collaboration with partners that have an established market presence and the infrastructure to serve their customer base.

Our initial public offering in April 2000 enabled us to raise $52 million in gross proceeds, bringing our liquid reserves to approximately $65 million at year end. We believe in a disciplined approach to company growth, resulting in a deliberately modest "burn rate." In 2000 our net burn rate was under $3 million. Though we expect this to increase in 2001, we have ample resources to fund short-term internal growth while building long-term value.

## FOSTERING SCIENTIFIC EXCELLENCE

In March 2000, we named Alan P. Wolffe, Ph.D., to the newly created position of chief scientific officer. Alan, the author of more than 250 scientific publications, is internationally known for his research on chromatin structure and its role in the regulation of endogenous gene expression. In addition to Alan, our scientific staff has grown to 60 and includes Ph.D.s from internationally recognized laboratories. It is the hard work of these individuals, and all our employees supporting them, that has made our considerable scientific progress possible. Their commitment, energy, and insights have resulted in the filing of 15 new U.S. patent applications (and associated international filings), bringing Sangamo's total number of internally generated U.S. patent applications to 26. This complements our portfolio of nine in-licensed U.S. patents and patent applications. Because we were the first to recognize the potential commercial utility of ZFPs, we believe we have amassed an extremely valuable intellectual property portfolio.

While we do not underestimate the challenges associated with commercializing a new technology, we are confident in and proud of the technological and human resources we have brought together at Sangamo. This is an exciting time, and we are in an extraordinary position to use our proprietary technology to create important new products across a variety of significant markets. We appreciate the support of our stockholders and the dedication of our employees as we advance our science and continue building our business.

Sincerely,

Edward Lanphier
President and Chief Executive Officer

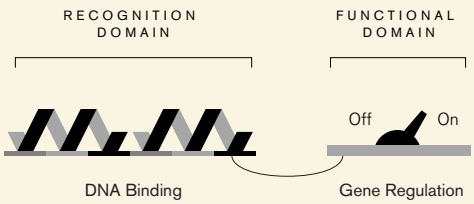
# Q & A

Understanding the massive changes underway in pharmaceutical research resulting from the impact of newly discovered genetic information can be daunting. Through a series of Questions & Answers, we will share with you our perspective on these exciting developments and explain how Sangamo's Universal Gene Recognition™ technology is critically positioned to make significant and unique contributions. We will further describe how our zinc finger DNA-binding protein (ZFP) transcription factors work and how they can be applied.

HOW WILL THE SEQUENCING OF THE HUMAN GENOME CHANGE THE WAY DRUGS ARE DISCOVERED AND DEVELOPED, AND WHERE DO ZFP TRANSCRIPTION FACTORS FIT IN?

The decoding of the human genome has made tremendous amounts of DNA sequence data available to researchers. The challenge facing researchers now is making sense of all this information. Researchers are striving to uncover the functions of newly discovered genes and to identify those that are associated with particular diseases. Many newly developed technologies (such as bioinformatics, microarrays, SNP analysis, and gene regulation techniques) are being used to help decipher the precise role of individual genes in health and disease. We believe that Sangamo's ZFP technology will prove to be a valuable tool in the discovery and validation of new drug targets. Its power and versatility may allow our technology to be used in virtually every step of this process—from assigning gene function and determining the role of individual genes in the disease process, to ascertaining the physiological impact of regulating specific genes. In addition, Sangamo's ZFP transcription factors may be used directly as therapeutics.

The Modular Structure of ZFP Transcription Factors




## HOW DO ZFP TRANSCRIPTION FACTORS FUNCTION?

ZFPs are a member of a class of proteins known as transcription factors. Transcription factors, which are found in the nucleus of every cell, actually bind to DNA to turn genes on or off. Genes, which are sections of DNA located on the chromosomes, control cellular functions through the production of proteins.

Transcription factors act to regulate genes in virtually all living organisms, including humans, animals, yeast, insects, and plants. Though there are many kinds of transcription factors, only ZFPs are amenable to being engineered to precisely target a particular gene or genes of interest. Since the over-expression or under-expression of individual genes has been implicated in many diseases, the ability to regulate genes at will has enormous potential benefit.

ZFP transcription factors have two components — one is a targeting mechanism that allows the ZFP to locate and bind to a specific genetic sequence; the other component influences gene expression at the target site. At Sangamo we are experts in the engineering and use of ZFP transcription factors to regulate genes. In applying our expertise, we are mimicking natural processes that have evolved over millions of years. Furthermore, we believe these processes can be used to regulate any gene of interest.

## WHAT IS REGULATORY DNA, AND WHAT IS THE BENEFIT OF UNDERSTANDING ITS ROLE IN GENE REGULATION?

If the letters on this page represent raw genomic DNA sequence, the sentences represent individual genes. However, it is the punctuation that controls how the sentences are read and gives them meaning. Regulatory DNA is the genomic equivalent of punctuation. It determines how, where, when, and even if the genes are read or expressed. Knowing the location and function of regulatory DNA allows us to understand and utilize natural genetic regulatory mechanisms in order to better control gene function.

For example, in order to regulate gene expression, it is important to identify regulatory DNA sequences for the targeting of transcription factors. Once these sequences are identified, Sangamo scientists can deduce which natural transcription factors regulate a gene of interest and which functional domains might be required to control its expression. In addition, the gene of interest may share regulatory DNA sequences with other genes and assist our scientists in understanding how genes are co-regulated. Finally, the identification of regulatory DNA and its associated natural transcription factors can yield the identification of new molecular targets for drugs to control disease processes that are associated with the aberrant expression of particular genes and/or gene families.

## WHAT ARE THE UNIQUE FEATURES OF YOUR ZFP TECHNOLOGY, AND HOW IS IT BEING USED FOR DRUG DISCOVERY?

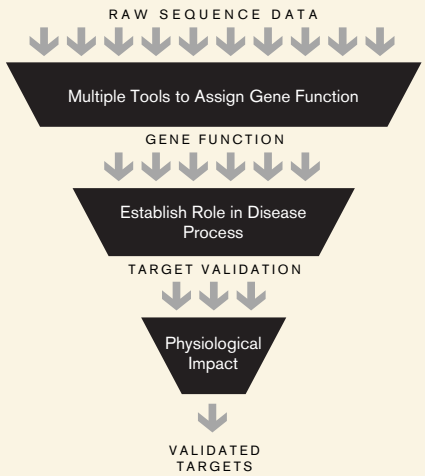
Our engineered ZFP transcription factors, which mimic the way nature regulates genes, have numerous potential applications in drug discovery and development, ranging from cell-based models to testing *in vivo.* No other technology platform that we are aware of has this much flexibility and breadth.

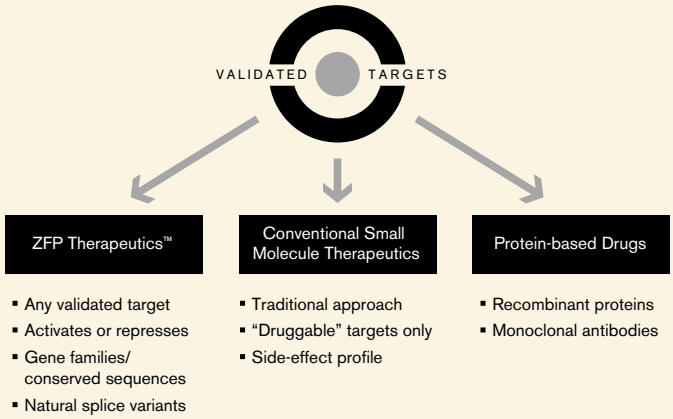
*Target Discovery and Validation:* Determining gene function is a fundamental step in discovering and validating potential drug targets, a task that ZFP transcription factors are ideally suited to perform, since they can activate or repress genes. Historically, target validation has been time and labor intensive. However, because ZFP transcription factors can be constructed to regulate pre-selected genes, the process of validating a target can proceed more quickly and efficiently. In addition, ZFP transcription factors can be adapted to permit the conditional regulation of genes. This allows scientists to derive quantitative information about a specific gene's role in the disease process.

*Knock-out Models:* Animal models are often used to measure the impact of a specific gene's activity on the entire organism. "Knock-out" models, in which the expression of a single gene is interrupted, are the current industry standard. However, conventional knock-out approaches suffer from serious limitations because they can only be created using mice, they are irreversible, and they are time-consuming to produce. Additionally, conventional knock-outs often fail outright due to embryonic lethality (the organism fails to develop) or developmental compensation (other genes substitute for the role of the missing gene). We are using ZFP technology to create superior animal models free of these limitations and to extend this technology to other species.

*Small Molecule Screening:* Once a viable pharmaceutical gene target is identified, ZFP transcription factors can be used to create cell lines for compound screens to identify small molecule drugs. In this process, large numbers of chemical structures are examined for biological activity. Because most small molecule drugs impact the function of proteins produced by genes (rather than the genes themselves), an effective way to screen potential drug candidates in cell-based assays is to over-express the gene encoding the target protein. This amplifies the effect of a candidate drug on the target protein. Such an approach has the added benefit of decreasing the likelihood of false positives. Our approach in this area of cell-based high throughput drug screening is promising and unique.

Using ZFP Transcription Factors to Validate Targets






## HOW WOULD ZFP-BASED THERAPEUTICS BE DIFFERENT FROM OTHER APPROACHES?

Biotechnology and pharmaceutical companies typically use several approaches to develop new drugs. The development of small molecule pharmaceuticals, the most traditional approach, relies principally on chemistry and an ever-increasing knowledge of disease biology. Typically, small molecules are used either to restore or diminish the biological activity of a protein produced by a gene in order to interfere with the disease process. Though this approach will certainly continue to be a productive source of new drugs, it is limited in that not all gene products can be affected by small molecule drugs. Such conventionally derived drugs can also have undesirable side-effect profiles.

More recently we've seen the emergence of recombinant proteins and monoclonal antibodies as new classes of drugs. These therapeutic proteins generally operate on the cell's surface or within the bloodstream; there will be many diseases in which such a therapeutic intervention will be successful. However, there are many diseases that cannot be addressed this way.

In contrast to both of these approaches, our ZFP transcription factors operate within the cell to regulate specific genes and thereby directly increase or decrease the production of proteins implicated in the disease process. This allows us to take advantage of the enormous amounts of genetic data now available to design novel therapeutics for essentially any validated target. Our approach also has the added benefit of being able to regulate a single gene or multiple variations (splice variants) of a gene or even groups of genes.

HOW CAN ZFP TRANSCRIPTION FACTORS LEAD TO NOVEL TREATMENTS FOR CARDIOVASCULAR DISEASE?

Research has indicated that the natural stimulation of blood vessel growth, or angiogenesis, by VEGF (vascular endothelial growth factor) involves the activation of multiple related VEGF protein variants. While other approaches have focused on a single VEGF protein variant, our technology allows the activation of all the major VEGF splice variants. We believe that our approach more closely mimics the way the body creates new vasculature. We are currently evaluating our novel ZFP transcription factors *in vivo* and observing preliminary evidence indicative of new blood vessel formation in preclinical models.

HOW WILL ZFP TRANSCRIPTION FACTORS BE DELIVERED AS THERAPEUTICS?

The optimal ZFP transcription factor delivery method depends on different variables, including the cell types and the diseases that are being targeted. Other factors include the specific location and desired duration of activity. Depending on these variables, delivery options include direct injection of the DNA encoding the ZFP transcription factor, vector-mediated delivery, or direct delivery of the ZFP protein, among others.

IN CONTRAST TO ESTIMATES OF OVER 100,000 GENES A YEAR AGO, IT IS NOW BELIEVED THAT THERE ARE ABOUT 30,000 GENES IN THE HUMAN GENOME. WHAT ARE THE IMPLICATIONS OF THESE FINDINGS?

Although it is now believed there are fewer genes, the biological complexity of human beings is well established. This complexity arises from variations in how those genes are expressed. For example, human genes make more and different proteins per gene than lower organisms do. This is due to alternative splicing of genes. Our ZFP transcription factors act directly on the endogenous gene, allowing us to exploit this important variable. In addition, the regulatory patterns governing human genes are more complex than those of lower organisms. Understanding regulatory DNA is critical, and we are a leader in the analysis and utilization of the regulatory genome.

HOW WILL SANGAMO EVOLVE OVER THE NEXT FEW YEARS?

Using our powerful ZFP technology platform, we are pursuing an increasing number of commercial opportunities. In the Universal GeneTools™ area, we expect to expand our relationships with existing collaborators, as well as explore the use of Universal GeneTools™ in a growing number of new applications. For example, we have seen interest in using regulatory DNA for toxicology testing *in vitro* and for creating regulatory DNA databases. In addition, we are working to develop ZFP transcription factors for groups of genes implicated in diseases such as cancer, infectious diseases, and cardiovascular disease. As a result of these studies, we are amassing regulatory pathway information, which provides insights into how we might regulate families of genes as a way of addressing disorders caused by multiple genes.

Since many diseases are caused or influenced by the under-expression or over-expression of disease-related genes, we see tremendous potential in establishing ZFP transcription factors as a new therapeutic modality. Through our own development activities, and in conjunction with partners, we plan to use our ZFP technology to develop new therapeutics.

In addition, our ZFP transcription factor expertise could be naturally extended to meet needs in the agriculture, industrial biotechnology, and DNA diagnostics markets. Our intent is to build our competency in these areas in partnership with existing market leaders.

# 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, 2000**

# SANGAMO BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

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

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

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

Securities registered pursuant to Section 12(g) of the act: Common stock $.01 par value
**(Title of Class)**

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

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

The aggregate market value of the voting stock held by non-affiliates of the Registrant of the Common Stock listed on the NASDAQ Stock Market was **$250,548,818** based on a closing stock price of $11.25 per share on March 15, 2001.

The total number of shares outstanding of the Registrant's Common Stock was 22,271,006 as of March 15, 2001.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of Registrant's Definitive Proxy Statement filed with the Commission pursuant to Regulation 14A in connection with the Annual Meeting are incorporated herein by reference into Part III of this Report. Certain Exhibits filed with the Registrant's Registration Statement on Form S-1 (Registration No. 000-30171), are incorporated herein by reference into Part IV of this Report.

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## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

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

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

Various terms and expressions similar to them are intended to identify these cautionary statements. These terms include: "anticipates," "believes," "continues," "could," "estimates," "expects," "intends," "may," "plans," "seeks," "should" and "will." Actual results may differ materially from those expressed or implied in those statements. Factors that could cause these differences include, but are not limited to, those discussed under "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.

## BUSINESS

### Overview

Sangamo is a leader in the research, development, and commercialization of transcription factors for the regulation of gene expression. Our Universal Gene Recognition™ platform is a proprietary technology based on engineering a naturally occurring class of transcription factors referred to as zinc finger DNA-binding proteins, or ZFPs. We believe that Universal Gene Recognition™ is a fundamentally enabling technology, widely applicable to pharmaceutical discovery, development of human therapeutics, plant agriculture, industrial biotechnology and clinical diagnostics. We intend to commercialize our technology broadly over its many applications.

### Background

*Genes and Gene Expression.* Deoxyribonucleic acid, or DNA, is present in all cells and is responsible for determining the inherited characteristics of all living organisms. DNA is arranged on chromosomes in individual units called genes. Genes encode proteins, which are assembled through the processes of transcription, whereby DNA is transcribed into ribonucleic acid, or RNA, and translation, whereby RNA is translated into protein. DNA, RNA, and proteins represent many of the molecular targets for pharmaceutical drug discovery and therapeutic intervention.

The human body is composed of specialized cells that perform different functions and are thus organized into tissues and organs. All 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 turned on or turned off (activated or repressed) in response to a wide variety of stimuli and developmental signals. Different sets of genes are expressed in distinct types of cells. 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.* Regulation of gene expression is controlled by proteins, called transcription factors, which bind to DNA. A transcription factor regulates gene expression by recognizing and binding to a specific DNA sequence associated with a particular gene and causing that gene to be activated or repressed. In all higher organisms, transcription factors consist of two components: the first is a DNA-binding element, or domain, that recognizes a specific DNA sequence and thereby directs the transcription factor to the proper chromosomal location; the second is a functional domain that determines whether the gene at that location is activated or repressed.

*Chromatin Architecture.* In order to efficiently organize the massive amounts of genetic information present in every cell, DNA is packaged within a structure known as chromatin, which renders certain areas of DNA less accessible than others. One way that cells are able to control chromatin structure, and make it accessible, is through the action of specific enzymes that target certain regulatory regions within chromatin. It is through the action of these enzymes that the chromatin structure within the nucleus is altered, and DNA is made more or less accessible to transcriptional machinery. Our process for the identification of ZFP transcription factors that regulate a target gene involves examining the chromatin structure of the gene to identify regions that are accessible for binding to ZFP transcription factors.

*The Genomics Revolution.* Genomics refers to the sequencing and functional analysis of the complete set of genes of diverse organisms throughout the animal, plant, and microbial world. Enormous scientific and financial resources have been dedicated to the sequencing of all human genes, including the Human Genome Project and other publicly and privately funded genomics initiatives. The sequence of the human genome was published in 2001.

Over the past decade, genomics research has produced a significant quantity of information on the location, sequence, and structure of thousands of genes. The number of genes in the human genome is currently believed to be approximately 30,000 unique genes. The challenge facing the pharmaceutical and other life science industries is how to derive medically and commercially valuable knowledge about the function of these genes from this large accumulation of new genomic sequence information.

*Genome-Based Drug Discovery and Other Applications.* The completion of the sequence of the entire human genome, with its bounty of new genes and potential drug discovery targets, simultaneously poses a competitive challenge and offers a significant commercial opportunity for every pharmaceutical company to:

- accelerate the identification of drug targets from thousands of newly discovered genes whose functions are unknown or poorly understood;
- sort through the hundreds of potential drug targets to confirm those for which proprietary drugs may be successfully developed;
- increase the accuracy and efficiency of the process by which pharmaceutical researchers screen large libraries of chemical compounds to identify those which have therapeutic activity, known as compound screening; and
- discover new therapeutics that can control disease through the regulation of genes.

The genomics revolution is also providing the sequences of plant genomes. Likewise, this poses a similar set of challenges and opportunities to agricultural biotechnology researchers, including identification of agriculturally important genes, the assessment of which genes may provide commercially important traits and the development of improved agrochemicals and crops. In another application of genomics research, bacteria, yeast and plants may be used for the biological production of industrial chemicals.

Our technology, which enables the design of transcription factors to regulate genes, could have significant commercial utility in each of the applications listed above.

**Sangamo's Universal Gene Recognition™ Technology Platform**

Our Universal Gene Recognition™ platform is a proprietary technology for the regulation of gene expression. The Sangamo platform combines the engineering of a class of transcription factors called zinc finger DNA-binding proteins (or ZFPs) with our knowledge of the chromatin structure of individual target genes. ZFP transcription factors (or ZFP TFs) have two distinct elements, or domains: a DNA-recognition domain that directs the transcription factor to the proper chromosomal location by recognizing a specific DNA sequence, and a functional domain that causes the gene to be activated or repressed. This two-component structure of our engineered ZFP TFs is modeled on the structure of naturally occurring transcription factors in all higher organisms.

Consistent with this two-domain structure, we take a modular approach to the design of engineered ZFP TFs. The recognition domain is composed of one or more zinc fingers. Each finger recognizes and binds to a three base pair sequence of DNA. Multiple fingers can be linked together to recognize longer stretches of DNA. By modifying those portions of a ZFP that interact with DNA, we believe we can create new ZFPs capable of recognizing DNA sequences in virtually any gene whose sequence is known.

The ZFP DNA recognition domain is coupled to a functional domain, creating a ZFP TF capable of controlling or regulating the target gene in a 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. It is also possible to use the ZFP TF in a way that temporarily activates or represses a gene. This

conditional regulation of a gene allows the effects of gene expression to be controlled in a reversible fashion.

An important variable influencing the expression of a specific gene in an individual cell is the surrounding chromosomal environment. Though every gene exists within every cell in the human body, only a small percentage of genes are activated in any given cell. To manage this genetic information efficiently, nature has evolved a sophisticated system that facilitates access to specific genes. This system relies on a DNA-protein complex called chromatin to efficiently package the genetic information that exists within each cell, thereby making certain genes in certain cells more readily accessible to transcription factors. By manipulating chromatin, Sangamo scientists have been able to more effectively access and regulate specific genes. Complementing this understanding of chromosomal architecture is a growing appreciation of the role that regulatory DNA sequences play in gene regulation. Regulatory DNA determines when and how a gene is regulated. By applying our knowledge of this specialized regulatory machinery, we believe we can more efficiently and predictably control gene function.

In order to regulate a gene, the ZFP TF must be delivered to a cell. We have licensed gene transfer technology from Targeted Genetics, Inc. for use with our Universal GeneTools™ in pharmaceutical discovery. We are evaluating this and other technologies for the delivery of ZFP TFs into cells for *in vitro* and *in vivo* applications.

To date, we have generated thousands of ZFPs and have tested their affinity, or tightness of binding, to their DNA target, and their specificity, or preference for their intended DNA target. We have developed standardized methods for the design, selection and assembly of ZFPs capable of binding to a wide spectrum of DNA sequences. We have linked ZFPs to functional domains to create ZFP TFs and have demonstrated the ability of these ZFP TFs to regulate a number of commercially important genes. We have also shown that engineered ZFP TFs can detect discrete changes in the sequences of medically interesting genes.

**The Sangamo Advantage**

We believe that the unique features of our ZFP TFs will result in important technical advantages as compared to other technologies. Among the advantages of our ZFP TF-based approach to gene regulation are:

- ZFP TFs normally regulate genes in all higher organisms;
- ZFPs can be designed to recognize unique DNA sequences, resulting in the ability to distinguish a single gene within the entire genome;
- ZFP TFs can activate or repress genes, enhancing their versatility;
- ZFP TFs can be used to regulate gene expression in humans, animals, plants, microbes and viruses; and
- ZFP TFs can themselves be activated and repressed, allowing conditional and reversible regulation of a gene.

We believe that the technical advantages of Universal Gene Recognition™ create leverage across multiple applications, products, markets, and commercial partners. While there are multiple market opportunities for our technology, we are concentrating our internal resources primarily on pharmaceutical discovery research and human therapeutics. While we also intend to leverage our technology in the areas of plant agriculture, diagnostics, and industrial biotechnology, this will be done in conjunction with corporate partners who have an established commercial focus in those areas.

*Human Therapeutics*

- **Human Therapeutics.** ZFP-Therapeutics™ are transcription factors developed as pharmaceutical products to treat a broad spectrum of diseases through the regulation of disease-related genes in the patient.
- **Manufacturing of Protein Pharmaceuticals.** We believe that ZFP-engineered cell lines can be used in methods for production of commercially relevant protein pharmaceuticals.

*Pharmaceutical Discovery Research*

- **Discovery of New Genes and Targets.** ZFP TFs can be used to change patterns of gene expression in cells and to determine the consequences associated with these changes.
- **Validation of Gene Targets.** ZFP TFs can be engineered to target a specific gene which is critical to researchers trying to confirm the validity of gene targets for drug development.
- **Animal Models of Human Diseases.** The reversible expression of ZFP TFs and the regulation of a specific gene *in vivo* is a desirable feature in animal models.
- **Assay Development.** The regulation of multiple genes may be an effective approach to the engineering of proprietary cells for the screening and identification of new pharmaceutical product candidates.

*Agricultural and Industrial Biotechnology*

- **Agricultural Biotechnology.** ZFP TFs can be used to regulate genes in plants, potentially leading to applications in the identification of plant genes, agrochemical discovery, and the development of new crops with enhanced nutritional properties.
- **Industrial Biotechnology.** ZFP TFs may be used to regulate genes in yeast, other microorganisms and plants which may permit the expanded use of engineered organisms for the manufacture of industrial chemicals.

*DNA Diagnostics*

- **SNP Detection.** The specificity of ZFPs permits the detection of single base pair differences in DNA, also known as single nucleotide polymorphisms, or SNPs. We believe SNPs are likely to become increasingly important in clinical diagnosis to determine an individual's susceptibility to disease or probable response to drug therapy.

**Commercial Applications**

We are pursuing commercial applications of our Universal Gene Recognition™ technology in pharmaceutical discovery, therapeutics for the treatment of human diseases, plant agricultural, industrial biotechnology, and clinical diagnostics.

**Sangamo's Business Platform**

*Universal GeneTools™ for Pharmaceutical Discovery*

We are applying Universal GeneTools™ to assist pharmaceutical researchers in their efforts to capitalize on the large accumulation of new genetic information being generated by the genomics revolution. Among the challenges that researchers must address are:

- identifying disease-related genes;
- confirming the validity of these genes and their protein products as appropriate targets for drug discovery by determining the function and suitability of targets for therapeutic intervention;

- testing the gene targets in both cell-based and animal-based model systems; and
- for validated drug targets, screening large collections of chemicals to identify chemical leads for drug development.

We believe our Universal GeneTools™ can accelerate the pace and quality of genome-based drug discovery at each of these critical steps.

*Universal GeneTools™ for Validation of Drug Targets*

As the number of genes identified as potential drug targets increases, the need to rapidly and efficiently confirm their role in disease increases as well. ZFP TFs are designed to regulate the expression of genes in cells and animals to determine their role in a particular disease. We, and our Universal GeneTools™ collaborators, have demonstrated the use of ZFP TFs in gene regulation in multiple cell models of gene expression, and are applying the technology to validate gene targets in animal models of human disease.

The use of ZFP TFs addresses a number of technical challenges associated with target validation studies in animals. Typically, animal models are genetically engineered mice in which a target gene has been disrupted, or knocked out. Generating a knockout mouse is labor intensive and can take one year or more. We believe the development time for mice which have been engineered with ZFP TFs, or ZFP-Transgenic™ mice, may be much faster than standard knockouts. In addition, researchers should gain more information from ZFP-Transgenic™ models because ZFP TFs can themselves be regulated thus permitting the reversible regulation of a target gene. This conditional control of genes in ZFP-Transgenic™ models should be a distinct advantage over conventional knockouts for the functional study of genes required during normal development. If an essential gene is knocked out, the knockout mouse will not grow to maturity. With ZFP TF gene regulation, however, we believe researchers will be able to regulate essential genes at virtually any point in the animal's development. This enables the study of a gene's function in mature animals without altering the animal's normal development. We are working closely with some of our Universal GeneTools™ collaborators, as well as with academic collaborators on ZFP-Transgenic™ models.

To date, we have entered into Universal GeneTools™ agreements with 22 leading pharmaceutical and biotechnology companies or their subsidiaries. These collaborators are applying our ZFP TFs to the validation of gene targets from several organisms for drug discovery. ZFP TFs are being incorporated into both cells and animals for this purpose. We are working with many of these companies to lay the basis for additional and expanded collaborations and increased market acceptance of our Universal GeneTools™ (see "Corporate Collaborations—Universal GeneTools™ Collaborations").

*ZFP-Engineered Cells for Identification of Drug Candidates*

We, as well as certain Universal GeneTools™ collaborators, are incorporating ZFP TFs into appropriate cell lines for the purpose of screening chemical compounds for drug discovery. In particular, we are engineering cell lines that permit the regulation of validated gene targets. Activating a gene may allow pharmaceutical researchers to increase the sensitivity, or responsiveness, to a given concentration of test compound in an assay. In addition, if a response is observed when the gene is both activated or repressed, it can be concluded that the test compound is not acting through the protein encoded by that gene and may be showing a false positive result.

We intend to commercialize ZFP-engineered cell lines for screening drug product candidates by developing relationships with strategic partners in our Universal GeneTools™ business. Cell lines will be engineered and optimized by Sangamo scientists and transferred to our partners for use in their drug screening operations.

*ZFP-Therapeutics™*

The promise of genome-based drug discovery includes the increasing supply of new drug targets, some of which are not amenable to current drug development approaches. ZFP TFs may offer a highly specific approach to regulation of disease-related genes. Due to alternative gene splicing, human genes make many more and different proteins per gene than lower organisms. Because our ZFP TFs act directly on the endogenous gene, they allow us to control this important variable. In addition, the regulatory patterns governing human genes are more complex than those of other organisms. Understanding this regulatory DNA is important, and Sangamo is a leader in the analysis and utilization of the regulatory genome. We are developing ZFP-Therapeutics™, for the treatment of human illnesses such as cardiovascular, infectious and ophthalmic diseases, and cancer.

*Cardiovascular Disease*

Cardiovascular disease is the leading cause of death in the United States with nearly one million deaths annually. Approximately 700,000 Americans undergo angioplasty (a procedure designed to open coronary blood vessels) each year due to cardiovascular disease. Approximately 35% of these patients suffer from restenosis, or partial reclosing of treated blood vessels, and require a second procedure or more invasive surgery such as coronary bypass.

There is increasing interest in the development of therapeutic approaches to cardiovascular disease that might stimulate the human body's natural ability to form new blood vessels. This natural process is called angiogenesis. We have developed ZFP TFs designed to activate the expression of angiogenic factors called vascular endothelial growth factors, or VEGFs for this purpose.

We believe an advantage of the ZFP-therapeutic approach is the potential ability to activate several therapeutically relevant genes by targeting a conserved DNA sequence in each gene. If successful this may provide a more effective biological stimulation of angiogenesis. To date we have seen encouraging preclinical results in two animal models. We are currently planning more extensive studies in an animal model designed to mimic the human disease condition. Our VEGF program is unique among approaches being explored by other companies. Rather than utilize a specific protein or single cDNA clone in which only a single form of VEGF is administered, we are activating the endogenous VEGF gene in its many forms. This is a critical difference as VEGF, in its natural state, has multiple variants that are involved in the normal physiological response. Our scientists have published research demonstrating that we can stimulate the production of VEGF splice variants in the same proportions normally observed in nature. In addition, our researchers are actively investigating other cardiovascular targets.

*Repression of Angiogenesis for Cancer and Diabetic Retinopathy*

In contrast to cardiovascular disease, there are diseases that might benefit from the inhibition of angiogenesis. Solid tumors require the ingrowth of new blood vessels if they are to grow beyond a few millimeters in diameter. Tumor cells frequently signal for additional blood supply by secreting VEGF. Inhibition of new blood vessel growth with ZFP-Therapeutics™ may prevent this angiogenesis and slow or halt solid tumor growth. Other ZFP TF approaches that we are investigating involve tumor suppressor genes and activation of immune stimulants.

Diabetic retinopathy, the leading cause of blindness among diabetics, is the result of uncontrolled vascularization of the retina and appears to be due to the over production of angiogenic factors such as VEGF. We believe that ZFP TFs designed to repress the expression of VEGF and other angiogenic factors may slow or reverse this process.

We have designed multiple ZFP TFs designed to repress the expression of the VEGF gene. These ZFP TFs have shown repression of VEGF expression in cultured cells derived from primary human tumors. We intend to test this same approach in animal models of angiogenesis and cancer.

*Hepatitis B Viral Disease*

Hepatitis B Virus, or HBV, is a worldwide health problem and is endemic in many regions of Asia and Africa. Although HBV infection can generally be prevented by vaccination, HBV remains a major clinical problem. It is estimated that there are 400 million chronic HBV carriers worldwide. The consequences of HBV infection include chronic active hepatitis and liver cirrhosis, the latter of which is a major cause of death. The risk of liver cancer in HBV carriers is estimated to be 100 times greater than in uninfected individuals.

Sangamo has designed several candidate ZFP TFs for the repression of HBV genes and tested these in cell-based models of HBV gene expression and HBV replication. Preliminary data suggests that some of these ZFP TFs can efficiently repress HBV gene expression. These proteins are being prepared for testing in animal models of HBV disease.

*Commercialization of ZFP-Therapeutics™*

We plan to develop and commercialize ZFP-Therapeutics™ in partnership with pharmaceutical and biotechnology companies. For certain ZFP-Therapeutics™ we intend to negotiate partnerships with terms that will provide partners with exclusive rights to the regulation of specific genes, delineating in exact terms the clinical indications and geographic areas covered under the agreement. We intend to commence additional therapeutic programs and, for certain ZFP-Therapeutics™, we intend to retain commercial product rights.

*ZFP Transcription Factors for Plant Agriculture*

The multibillion-dollar agrochemical industry is undergoing a transition to genome-based product discovery that is parallel to that of the worldwide pharmaceutical industry. In a relatively recent development, the genomics revolution has been applied to the sequencing of plant genes from some of the world's largest commercial crops. We believe that the genomes of most commercially important plants will be sequenced over the next several years. Similar to trends in pharmaceutical research, discovery of thousands of plant genes is creating enormous demand for technologies that can help ascertain gene function, identify important gene and agrochemical targets and regulate those genes through improved transgenic plants.

Natural ZFP TFs also regulate genes in plants. The ability to identify and subsequently regulate the expression of genes with ZFP TFs could lead to the creation of new plants that may increase crop yields, lower production costs, resist herbicides, pesticides and plant pathogens, and permit the development of branded agricultural products with unique nutritional and processing characteristics. In addition, ZFP TFs may be used to confirm the role of newly discovered genes in plant growth, metabolism and resistance to pathogens.

*ZFP-Engineered Cell Lines for the Production of Pharmaceuticals*

Protein pharmaceuticals manufactured with genetically modified cells now account for more than $10 billion in annual worldwide sales. By using ZFP TFs to activate the expression of endogenous genes encoding therapeutic proteins in cells, we are able to genetically engineer these cells for new production methods for protein pharmaceuticals and for the expression of therapeutically relevant antigens for creation of antibodies.

*ZFPs for Pharmacogenomics and Clinical Diagnostics*

Single nucleotide polymorphisms, or SNPs, are DNA sequence variations at specific chromosomal sites. SNPs have been the subject of increasing research in recent years. Some SNPs are strongly associated with some disease states, providing indicators of disease susceptibility and how individual patients might respond to a particular drug therapy. The pharmaceutical industry is investing in technology to monitor and record patient SNPs in clinical trials and to correlate clinical outcomes with SNP status.

We have shown that ZFPs can effectively detect small variations in DNA sequences and therefore may be used to detect SNPs in clinical samples. Further, we believe that ZFPs have the potential to eliminate the extensive manipulation of patient DNA samples, reducing the time and cost, and increasing the accuracy of diagnostic assays.

We intend to commercialize ZFPs for SNP detection and DNA diagnostics in conjunction with partners engaged in the development of SNP diagnostic technology or the manufacturing and marketing of clinical diagnostics.

*ZFP Transcription Factors for Industrial Biotechnology*

The U.S. chemical industry is undertaking a major strategic initiative to develop bacterial, fungal, and plant biological systems for the production of industrial chemicals. This initiative is motivated by considerations of product performance, capital costs, environmental impact, and dependence on fossil fuels to provide the raw materials for the production of many chemical intermediates in the United States and around the world.

A principal challenge in harnessing biological systems for this purpose is engineering bacterial and fungal cells and plants to achieve predictable and specific regulation of multiple genes. ZFP TFs may be applicable for this task.

ZFP TFs may prove to be a commercially feasible approach for the engineering of cells and plants for the biological production of industrial chemicals and food additives. We intend to seek strategic relationships with corporate partners in the chemical and food processing industries to develop and commercialize applications of Universal Gene Recognition™ in industrial biotechnology.

**Corporate Collaborations**

We intend to apply our ZFP TF technology platform in several commercial applications where the products provide ourselves and our strategic partners and collaborators with technical and economic advantages. We have established and will continue to pursue Universal GeneTools™ collaborations and strategic partnerships with selected pharmaceutical and biotechnology companies to fund internal research and development activities and to assist in product commercialization.

*Edwards Lifesciences Strategic Partnership*

In January 2000, we announced the initiation of 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 cardiovascular and peripheral vascular diseases. Edwards purchased a $5 million note that converted, together with accrued interest, into common stock at the time of our initial public offering at the IPO price. We have received $1 million in research funding from Edwards, some of which has not yet been recognized. 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. Together with accrued interest, this note converted into common stock at the time of our initial public offering at the IPO price. We will be responsible for advancing product

candidates into preclinical animal testing. Edwards will be responsible for preclinical development, regulatory affairs, clinical development and the sales and marketing of the ZFP-Therapeutic™ products. In the future, we may receive up to $26 million in milestone payments in connection with the development and commercialization of the first product under this agreement. Sangamo will also receive royalties on product sales. There is no assurance that the companies will achieve our development and commercialization milestones. 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.

*Universal GeneTools™ Collaborations*

We began marketing our Universal GeneTools™ products to the pharmaceutical and biotechnology industry in 1998. Our Universal GeneTools™ business is based upon the delivery of an engineered ZFP TF which is capable of regulating the expression of a gene for which it is specifically designed and targeted. Since 1998, we have entered into Universal GeneTools™ collaborations with 22 leading pharmaceutical or biotechnology companies or their subsidiaries.

Our Universal GeneTools™ agreements generally contain the following terms:

- collaborators provide us with the gene target they wish to study and we design and deliver ZFP TFs designed specifically for that collaborator's gene target;
- collaborators retain all their rights in confidential gene targets and any data they generate with our ZFP TFs;
- collaborators must provide us with the DNA sequence for the genes they wish to regulate;
- in most agreements, we retain the rights to make, use, develop, and sell any product or service utilizing the ZFP TFs we provide to our collaborators. In the other agreements, however, our rights are limited, but we do not regard these limitations as material to our business;
- many of our agreements provide that collaborators make a partial payment for ZFP TFs during the design stage, and complete their payment after receipt of the ZFP TFs. The agreements do not provide for milestone or royalty payments.

To date, we have not licensed any intellectual property rights to our current Universal GeneTools™ collaborators that we believe are material to our business. Our Universal GeneTools™ collaborators are under no obligation to pursue product development programs with us, to use our technology, or to purchase any additional product from us. See "Risk Factors—Commercialization of our technologies depends on strategic partnering with other companies, and if we are not able to find strategic partners in the future, we may not be able to develop our technologies or products which could slow our growth and decrease our revenues."

*Plant Agriculture Collaboration*

To commercialize ZFP TFs in agricultural biotechnology, we intend to seek strategic relationships with corporate partners having capabilities in the research, development and commercialization of agricultural products. In January 2001, we announced our first plant agriculture collaboration with Renessen LLC, a joint venture between Cargill and Monsanto Company. Under the terms of the agreement, Sangamo will receive certain payments, including research funding and royalties on product sales. In return, Renessen will receive the right to commercialize ZFP-engineered seeds for specific applications in the animal feed and processing industries.

**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 and licensing agreements, to establish and protect our proprietary rights. We have licensed intellectual property directed to the design, selection and use of ZFPs and ZFP TFs for gene regulation from the Massachusetts Institute of Technology, Johnson and Johnson, The Scripps Research Institute and the Medical Research Council. These licenses grant us rights to make, use and sell ZFPs and ZFP TFs under seven families of patent filings. All of these patent families have been filed in the United States and three have been filed internationally in selected countries. These patent filings have resulted in four issued U.S. patents to date. We believe these licensed patents and patent applications include several of the early and important patent filings directed to design, selection and use of ZFPs and ZFP TFs.

We also have pending twenty families of U.S. patent filings based on Sangamo's internal research, four of which have been filed internationally in selected countries to date, directed to improvements in the design and use of ZFPs and ZFP TFs. We have also licensed five issued U.S. patents directed to hybrid DNA-binding proteins in which a DNA-binding domain is linked to a detection domain for diagnostic purposes. In the aggregate, we believe that our licensed patents and patent applications, as well as the pending Sangamo patent applications, will protect the commercial development of ZFPs and ZFP TFs. 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 should not exceed $1 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, generation and composition of ZFPs, the genes encoding these proteins and the application of ZFPs and ZFP TFs in pharmaceutical discovery, therapeutics for the treatment of human diseases, clinical diagnostics, and agricultural and industrial biotechnology applications.

Although we have filed for patents on some aspects of our technology, we cannot assure you that patents will issue as a result of these pending applications or that any patent that has or may be issued will be upheld. 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 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 result in diversion of resources. The outcome of these proceedings is uncertain and could significantly harm our business.

We have received unsolicited invitations to license existing patented technology from a number of third parties, at least one of which contained an allegation of infringement. No litigation is being threatened and no license fees have been proposed. Upon careful analysis of each of these technologies, we have determined that we already own rights to these technologies or that our scientific

and commercial interests would not benefit from the acquisition of rights to these technologies. Further, we believe that the making, using or selling of our products and processes need not infringe any claims in the proffered patents. Accordingly, we have declined to enter into license negotiations with these parties. We cannot assure you, however, that these parties will not bring future actions against us, our collaborators or strategic partners alleging infringement of their patents. As detailed above, the outcome of any litigation, particularly lawsuits involving biotechnology patents, is difficult to predict and likely to be costly regardless of the outcome. In these circumstances, i.e. litigation, the risks of a negative impact on our business can neither be clearly defined nor entirely eliminated.

In the future, however, 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."

**Competition**

We believe that we are a leader in the field of ZFP TF gene regulation. We are aware that there are many companies focused on other methods for regulating gene expression and a limited number of commercial and academic groups pursuing the development of ZFP gene regulation technology. The field of regulation of gene expression is highly competitive, and we expect competition to persist and intensify in the future from a number of different sources, including pharmaceutical and biotechnology companies, academic and research institutions, and government agencies that will seek to develop technologies that will compete with our Universal Gene Recognition technology platform.

Any products that we develop using our Universal Gene Recognition™ technology will participate in highly competitive markets. Many of our potential competitors in these markets, either alone or with their collaborative partners, may have substantially greater financial, technical and personnel resources than we do, and they may succeed in developing technologies and products that would render our technology obsolete or noncompetitive. In addition, many of those competitors have significantly greater experience than we do in their respective fields.

Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or commercializing ZFP TFs or other competitive products before us. If we commence commercial product sales, we will 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.

Competition may also arise from other drug development technologies and methods of preventing or reducing the incidence of disease, small molecule therapeutics, or other classes of therapeutic agents.

We expect to face intense competition from other companies for collaborative arrangements with pharmaceutical, biotechnology, agricultural and chemical 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;
- develop and maintain products that reach the market first, 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
- manufacture, market and sell any product that we develop.

**Government Regulation**

We have not applied for any regulatory approvals with respect to any of our technology or products under development. We anticipate that the production and distribution of any therapeutic or diagnostic products developed, either alone or with our strategic partners or collaborators, will be subject to extensive regulation in the United States and other countries. We intend to pursue therapeutic, diagnostic, agricultural and industrial biotechnology products, some of which may be subject to different government regulation.

Before marketing in the United States, any pharmaceutical, therapeutic or diagnostic 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. Before commencing clinical investigations in humans, we must submit to, and receive approval from, the FDA of an Investigational New Drug application. We expect to rely on some of our strategic partners to file Investigational New Drug applications and generally direct the regulatory approval process for some products developed using our Universal Gene Recognition™ technology.

Clinical testing must meet requirements for:

- institutional review board oversight;
- informed consent;
- good clinical practices; and
- FDA oversight.

Before receiving FDA clearance to market a product, we must demonstrate that the product is safe and effective on the patient population that will be treated. 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 studies. Marketing or promoting a drug for an unapproved indication is generally prohibited. Furthermore, clearance may entail ongoing requirements for post-marketing studies. Even if this regulatory clearance is obtained, a marketed product, its manufacturer and its manufacturing facilities are subject to continual review and periodic inspections by the FDA. Discovery

of previously unknown problems with a product, manufacturer or facility may result in restrictions on this product or manufacturer, including costly recalls or withdrawal of the product from the market.

The length of time necessary to complete clinical trials varies significantly and may be difficult to predict. Clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. Additional factors that can cause delay or termination of our clinical trials, or the costs of these trials to increase, include:

- slow patient enrollment due to the nature of the protocol, the proximity of patients to clinical sites, the eligibility criteria for the study or other factors;
- inadequately trained or insufficient personnel at the study site to assist in overseeing and monitoring clinical trials;
- delays in approvals from a study site's review board;
- longer treatment time required to demonstrate effectiveness or determine the appropriate product dose;
- lack of sufficient supplies of the product candidate;
- adverse medical events or side effects in treated patients; and
- lack of effectiveness of the product candidate being tested.

In addition, the field testing, production and marketing of genetically engineered plants and plant products are subject to federal, state, local and foreign governmental regulation. Regulatory action or private litigation could also 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 applied to foods developed through traditional plant breeding. Genetically engineered food products, however, will be subject to premarket review if these products raise safety questions or are deemed to be food additives. Our products or those of our strategic partners may be subject to lengthy FDA reviews and unfavorable FDA determinations.

International Biosafety Protocols have been announced in which signatory states may require that genetically engineered food products be labeled as such. Additional and more restrictive international or foreign policies may be developed which further limit our ability to pursue our business plan in relation to agricultural biotechnology.

Outside the United States, our ability to market a product is contingent upon receiving a 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 Community registration procedures are available to companies wishing to market a product in more than one EC 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 intend to consult with, and when appropriate, to hire personnel with expertise in regulatory affairs to assist us in obtaining appropriate regulatory approvals as required. 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.''

**Employees**

As of February 29, 2001, we had 66 full-time employees, 28 of whom hold Ph.D. degrees and 34 of whom hold other graduate or technical degrees. Of our total workforce, 58 are engaged in research and development activities and 8 are engaged in business development, finance and administration. None of our employees is represented by a collective bargaining agreement, nor have we experienced work stoppages. We believe that our relations with our employees are good.

## Risk Factors

*An investment in our common stock is risky. You should carefully consider the following risks, as well as the other information contained in this report. If any of the following risks actually occurs, it would harm our business. In that case, the trading price of our common stock could decline, and you might lose all or a part of your investment. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently see as immaterial, may also harm our business.*

### Risks Related to Our Business

**Our gene regulation technology is unproven and if we are unable to use this technology in all our intended applications, it would limit our revenue opportunities.**

Our technology involves new and unproven approaches to gene regulation. Although we have generated some ZFP TFs for some gene sequences, we have not created ZFP TFs for all gene sequences and we may not be able to create ZFP TFs for all gene sequences which would 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 done so in humans and many other organisms, and the failure to do so could restrict our ability to develop commercially viable products. If we and our Universal GeneTools™ collaborators or strategic partners are unable to extend our results to new gene sequences and experimental animal models, we may be unable to use our technology in all its intended applications. Also, delivery of ZFP TFs into cells in these and other environments is limited by a number of technical challenges, which we may be unable to surmount.

The utility of our ZFP TFs is in part based on the belief that the regulation of gene expression may help scientists better understand the role of human, animal, plant and other genes in drug discovery, as well as therapeutic, diagnostic, agricultural and industrial biotechnology applications. There is only a limited understanding of the role of 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 Universal GeneTools™ collaborators or our strategic partners may not be able to use our technology to identify and validate drug targets or other targets in order to develop commercial products.

**If our technology does prove to be effective, it still may not lead to commercially viable products, which would reduce our revenue opportunities.**

Even if our Universal GeneTools™ collaborators or strategic partners are successful in identifying drug targets or other targets based on discoveries made using our ZFP TFs, they may not be able to discover or develop commercially viable products or may determine to pursue products that do not use our technology. To date, no company has developed or commercialized any therapeutic, diagnostic, agricultural or industrial biotechnology 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 plan and future growth.

**Initial evaluations of our engineered ZFP TFs delivered to our Universal GeneTools™ collaborators have produced mixed results.**

Some of our Universal GeneTools™ collaborators were unable to substantiate the effects of our gene regulation technology. All reported failures were re-evaluated at Sangamo using our current approach of examining the local chromatin structure for accessible sites and then targeting ZFP TFs to these areas. Consequently, additional ZFP TFs were designed and tested for these targets, and data was generated at Sangamo, or by our partners, confirming the ability to regulate these targets. Sangamo now performs this more extensive validation on all Universal GeneTools™ targets prior to use by

external parties. However, there can be no assurances that we will be able to regulate all gene targets. Further, some of our collaborators have not yet generated the final results of their testing, and no assurances can be given that our collaborators will be able to achieve the same results we have demonstrated. These ZFP TFs, or ones engineered in the future, may not function as intended. If we are unsuccessful in engineering ZFP TFs that achieve positive results for our collaborators or strategic partners, this would significantly harm our business by reducing 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 using our Universal Gene Regulation™ technology platform will participate in highly competitive markets. Even if we are able to generate ZFP TFs that achieve useful results, competing technologies may prove to be more effective or less expensive which would limit or eliminate our revenue opportunities. Competing technologies may include other methods of regulating gene expression. Universal Gene Recognition™ has broad application in the life sciences, and competes with a broad array of new technologies and approaches being applied to genetic research by many companies. Competitive technologies include those used to analyze the expression of genes in cells or tissues, determine gene function, discover new genes, analyze genetic information and regulate genes. Our competitors include biotechnology companies with:

- competing proprietary technology;
- substantially greater capital resources than ours;
- larger research and development staffs and facilities than ours;
- greater experience in product development and in obtaining regulatory approvals and patent protection; and
- greater manufacturing and marketing capabilities than we do.

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.

**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 66 employees, 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 academic and other research 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. If we lose the services of personnel with these types of skills, it could impede significantly the achievement of our research and development objectives. If we fail to negotiate additional acceptable collaborations with academic and other research institutions and scientists, or if our existing collaborations are unsuccessful, our technology development programs may be delayed or may not succeed.

At present the scope of our needs is somewhat limited to the expertise of personnel who are able to engineer ZFP TFs and apply them to gene regulation. In the future, we will need to hire additional personnel and develop additional academic collaborations as we continue to expand our research and development activities and to work on some of our planned projects because these activities and projects will require additional expertise in disciplines applicable to the products we would develop with them. Further, our planned activities will require existing management to develop additional expertise. We do not know if we will be able to attract, retain or motivate the required personnel to achieve our goals.

**We may have difficulty managing our growth, which may slow our growth rate or give rise to inefficiencies which would reduce our profits.**

We have recently experienced, and expect to continue to experience, growth in the number of our employees and the scope of our operating and financial systems. This growth has resulted in an increase in responsibilities for both existing and new management personnel. Our ability to manage growth effectively will require us to continue to implement and improve our operational, financial and management information systems and to recruit, train, motivate and manage our employees. We may not be able to manage our growth and expansion, and the failure to do so may slow our growth rate or give rise to inefficiencies which would reduce our profits.

**We are at an early stage of development and may not succeed or become profitable.**

We began operations in 1995 and are at an early stage of development. We have incurred significant losses to date, and our revenues have been generated from federal government research grants, Universal GeneTools™ collaborators and a strategic partner. Our Universal GeneTools™ collaborators are evaluating our ZFP TFs. If the ZFP TFs do not provide sufficient value to those collaborators, then they may not continue to work with us. This may also impair our ability to attract additional collaborators. As a result, our business is subject to all of the risks inherent in the development of a new technology, which includes the need to:

- attract additional new Universal GeneTools™ collaborators and strategic partners and expand existing relationships;
- attract and retain qualified scientific and technical staff and management, particularly scientific staff with expertise to further apply and develop our early stage technology;
- attract and enter into research collaborations with academic and other research institutions and scientists;
- obtain sufficient capital to support the expense of developing our technology platform and developing, testing and commercializing products;
- develop a market for our products; and
- successfully transition from a company with a research focus to a company capable of supporting commercial activities.

In addition to competitive pressures, problems frequently encountered with research, development and commercialization of new technologies and products will likely affect us. Most of our ZFP TF design and testing procedures take place on a relatively small scale. In the future, we intend to apply ZFP TF design and testing procedures at a scale involving hundreds of genes per year. We may not be able to successfully or efficiently achieve this scale. In addition, while we have had success in applying ZFP TF gene regulation in our laboratories, we may have difficulty in transferring our technology to our collaborators' and strategic partners' laboratories.

**We anticipate continuing to incur operating losses for at least two years. If material losses continue for a longer 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 highly uncertain, and we may not be profitable in the foreseeable future. We have been engaged in developing our Universal Gene Recognition™ technology since inception, which has and will continue to require significant research and development expenditures. To date, we have generated our revenues from federal government research grants, Universal GeneTools™ collaboration agreements and a strategic partnership agreement. As of December 31, 2000, we had an accumulated deficit of approximately $17.9 million. Even if we succeed in increasing our current product and research revenue or developing additional commercial products, we expect to incur losses in the near future and may continue to incur losses for at least the next two years. These losses may increase as we expand our research and development activities. 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 require additional financing. If we are unable to obtain this financing, we will be unable to develop our technology and products.**

We do not know whether we will require additional financing, or that, if acquired, it will be on terms favorable to our stockholders or us. We have consumed substantial amounts of cash to date and expect capital outlays and operating expenditures to increase over the next several years as we expand our infrastructure and research and development activities. We may raise this financing through public or private financings or additional Universal GeneTools™ collaborations, strategic partnerships or licensing arrangements. If additional financing becomes necessary in the future, it would likely be at least tens of millions of dollars.

While we believe our current financial resources should be adequate to sustain our operations for two years, it is not possible to estimate our financial requirements thereafter. However, to the extent we concentrate our efforts on proprietary human therapeutics, we will require FDA approval and extensive clinical trials of our potential products. This process may cost in excess of $100 million per product.

**Factors beyond our control could cause our quarterly results to fluctuate.**

We believe that period-to-period comparisons of our results of operations are not necessarily meaningful and should not be relied upon as indicators of future performance. The variability of receipt of funds from corporate partners, as well as revenue recognition accounting rules, including the SEC staff accounting bulletin No. 101, may lead to quarterly fluctuations in our revenue. We generally operate with limited backlog in our Universal GeneTools™ business because our ZFP TFs are typically designed and engineered as orders are received. As a result, product sales in any quarter are generally dependent on orders received and shipped in that quarter. Universal GeneTools™ sales are also difficult to forecast because demand varies substantially from customer to customer and from period to period. While strategic partnerships may provide us with committed quarterly research funding, the signing of such deals, and the subsequently initiation of revenue recognition, is also uncertain.

Due to all of the foregoing factors, it is possible that in one or more future quarters our results may fall below the expectations of public market analysts and investors. In such event, the trading price of our common stock would likely be adversely impacted.

**Our Universal GeneTools™ collaboration agreements with companies are of limited scope, and if we are not able to expand the scope of our existing collaborations or enter into new ones, our revenues will be negatively impacted and our research initiatives may be slowed or halted.**

Our Universal GeneTools™ collaborations are important to us because they permit us to introduce our technology to many companies by supplying them with a specified ZFP TF for a payment without licensing any of our technology. The collaboration agreements, however, are of limited scope. Under most of our current Universal GeneTools™ collaborations we receive a payment for supplying ZFP TFs for gene targets specified by the companies. These companies are not obligated to make continuing payments to us in connection with their research efforts or to pursue any product development program with us. As a result, we may not develop long-term relationships with these companies that could lead to additional revenues. If we are not able to expand the scope of our existing collaborations or enter into new ones, we may have reduced revenues and be forced to slow or halt research initiatives.

**Commercialization of our technologies depends on strategic partnering with other companies, and if we are not able to find strategic partners in the future, we may not be able to develop our technologies or products, which could slow our growth and decrease our revenues.**

We expect to rely, to some extent, on our strategic partners to provide funding in support of our research and to perform some independent research, preclinical and clinical testing. Our technology is broad based and we do not currently possess the resources necessary to develop and commercialize potential products that may result from our technologies, or the resources or capabilities to complete any approval processes that may be required for the products, therefore we must enter into additional strategic partnerships to develop and commercialize products. Of the thousands of ZFP TFs which target specific genes, our current collaborators and strategic partners are working with less than 100, therefore in order to fully utilize our ZFP transcriptions factors we would need a number of new Universal GeneTools™ collaborators and strategic partners to accomplish our research.

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 uses 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.

If we do not enter into additional strategic partnering agreements, we will experience reduced revenues and may not develop or commercialize our products. The loss of our current or any future strategic partnering agreement would not only delay or terminate the potential development or commercialization of any products we may derive from our technologies but 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 agreement is, and we would expect any future arrangement to be based on the achievement of milestones. Under the strategic partnering agreements, we expect to receive revenue for the research and development of a therapeutic product 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 current Universal GeneTools™ collaboration agreements only pay us to supply ZFP TFs for the collaborator's independent use, rather than for future results of the collaborator's efforts. If we or any strategic partner fails to meet specific milestones, then the strategic partnership can be terminated which could decrease our revenues.

**Our Universal GeneTools™ collaborators and strategic partners may decide to adopt alternative technologies or may be unable to develop commercially viable products using our technology, which would negatively impact our revenues and our strategy to develop these products.**

Our collaborators or strategic partners may adopt alternative technologies of our competitors which could decrease the marketability of our technology. Because many of our Universal GeneTools™ collaborators or strategic partners are likely to be working on more than one research 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 gene regulation 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 may be unable to license gene transfer technologies that we may need to commercialize our Universal Gene Recognition™ technology.**

In order to regulate an endogenous gene, the ZFP TF must be delivered to a cell. We have licensed certain gene transfer technology for use with our Universal GeneTools™ in pharmaceutical discovery. We are evaluating this and other technologies which may need to be used in the delivery of ZFP TFs into cells for *in vitro* and *in vivo* applications. However, we may not be able to license the gene transfer technologies required to develop and commercialize our Universal Gene Recognition™ technology. We have not developed our own gene transfer technologies and 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 intend to conduct proprietary research programs to discover therapeutic product candidates. These programs increase our risk of product failure, may significantly increase our research expenditures, and may involve conflicts with our collaborators and strategic partners.**

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 and the expenditure of significantly greater funds than our current research activities. In addition, these programs will require substantial commitments of time from our management and staff. Moreover, we have no experience in preclinical or clinical testing, obtaining regulatory approval or commercial-scale manufacturing and marketing of therapeutic products, and we currently do not have the resources 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, market and sell products. We do not have these capabilities, and we may not be able to develop or otherwise obtain the requisite preclinical, clinical, regulatory, manufacturing, marketing and sales capabilities.

In addition, disagreements with our Universal GeneTools™ 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.

**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 these patents against third party challenges. The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and 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, and our future licenses will, contain performance obligations. If we fail to meet those obligations, the licenses could be terminated. If we are unable to continue to license these technologies on commercially reasonable terms, or at all, we may be forced to delay or terminate our product development and research activities.

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

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

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

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

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 which 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 Sangamo has no current plans to use the associated inventions. More particularly, we are aware of pending patent applications with claims directed to zinc finger libraries and methods of designing zinc finger DNA-binding proteins. These applications are not issued patents. If the pending claims were granted in their present form, however, they could interfere with our right to commercialize our products and processes. 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 partner 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 our Universal GeneTools™ collaborators, strategic partners or we 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. While we believe that our proprietary intellectual property would give us substantial leverage to secure a cross-license, it is uncertain that any license required under that patent or patents would be made available on commercially acceptable terms, if at all. We believe that 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 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 Universal GeneTools™ 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. See "Business—Intellectual Property and Technology Licenses."

**Our potential therapeutic products are subject to a lengthy and uncertain regulatory process, and if these potential products are not approved, we will not be able to commercialize those products.**

The FDA must approve any therapeutic and some diagnostic products based on ZFP TF technology before it can be marketed in the United States. The process for receiving regulatory approval is long and uncertain, and even if we had a potential product, this product may not withstand the rigors of testing under the regulatory approval processes.

Before commencing clinical trials in humans, we must submit and receive approval from the FDA of an Investigational New Drug Application. Clinical trials are subject to oversight by institutional review boards and the FDA and these trials must meet particular conditions, such that they:

- must be conducted in conformance with the FDA's good clinical practice regulations;
- must meet requirements for institutional review board oversight;
- must meet requirements for informed consent;
- are subject to continuing FDA oversight;
- may require large numbers of test subjects; and
- may be suspended by us or the FDA 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 Investigational New Drug application or the conduct of these trials.

We must also demonstrate that the product is safe and effective in the patient population that will be treated. Data obtained from preclinical and clinical activities are susceptible to varying interpretations that could delay, limit or prevent regulatory clearances. In addition, we may encounter 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. Failure to comply with applicable FDA or other applicable regulatory requirements may result in criminal prosecution, civil penalties, recall or seizure of products, total or partial suspension of production or injunction, as well as other regulatory action against our potential products or us. Additionally, we have no experience in conducting and managing the clinical trials necessary to obtain regulatory approval.

In addition, we may also require approval 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 have not submitted an application with the FDA or any other regulatory authority for any product candidate, and neither the FDA nor any other regulatory authority has approved any therapeutic, diagnostic, agricultural or industrial product candidate developed with our technology for commercialization in the United States or elsewhere.

**Regulatory approval, if granted, may be limited to specific uses or geographic areas which could limit our ability to generate revenues.**

Regulatory approval may limit the indicated use for which we can market a product. Further, once regulatory approval for a product is obtained, it 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 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.

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.

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

Genetically engineered products are currently subject to public debate and heightened regulatory scrutiny, either of which could prevent or delay production of agricultural products. We may develop genetically engineered agricultural products for ourselves or with our strategic partners. The field testing, production and marketing of genetically engineered 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 engineered 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 applied to foods developed through traditional plant breeding. Genetically engineered food products, however, will be subject to premarket 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 engineered products created with our gene regulation technology.

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

**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 us and our corporate or academic collaborators, strategic partners or scientific advisors or directors, the other party may act in its self-interest which may limit our ability to implement our strategies. Some of our Universal GeneTools™ or academic collaborators or strategic partners are conducting multiple product development efforts within each area that is the subject of the collaboration with us. Generally, in each of our collaborations, we have agreed not to conduct independently, or with any third party, any research that is competitive with the research conducted under our collaborations. Our collaborations may cause us to limit the areas of research that we pursue, either alone or with others. 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 their withdrawal of 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.

**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.

**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. 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 are subject to federal, state and

local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with these laws and regulations could be significant.

**Anti-takeover provisions in our certificate of incorporation and Delaware law could prevent a potential acquiror from buying your stock.**

Anti-takeover provisions of Delaware law, in our certificate of incorporation and equity benefit plans may make a change in control of our company more difficult, even if a change in control would be beneficial to our stockholders. These provisions may allow our board of directors to prevent or make changes in the management and control of our company. In particular, our board of directors will be able to 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. Further, without any further vote or action on the part of the stockholders, the board of directors will 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 will 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; or
- limits who may call a special meeting of stockholders.

**Our stock price may be volatile, which could result in substantial losses for investors.**

Volatility in the biotechnology market could cause you 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 become highly volatile. The market prices of securities of biotechnology companies are currently highly volatile. The market price of our common stock may fluctuate significantly in response to the following factors, some of which are beyond our control:

- changes in market valuations of similar companies;
- 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;
- deviations in our results of operations from the estimates of securities analysts; and
- future sales of our common stock or other securities.

**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, directors and principal stockholders beneficially own, in the aggregate, sixty-eight percent of our outstanding common stock. As a result, these stockholders, if they choose to act

together, will be able to exercise control over all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This could have the effect of delaying or preventing a change of control of Sangamo, which in turn could reduce the market price of our stock.

**Item 2. Properties**

We currently lease approximately 22,000 square feet of research and office space located at 501 Canal Boulevard in Richmond, California. The leases expire in 2004. We believe that the facilities we currently lease are sufficient for approximately the next 24 months.

**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 and Related Stockholder Matters

Our common stock has traded on the NASDAQ National Market under the symbol "SGMO" since April 6, 2000. The following table sets forth, for the period indicated, the high and low bid quotations for the common stock as reported by the NASDAQ National Market.

**Common Stock**

| | Price | |
|---|---|---|
| | High | Low |
| Year ended December 31, 2000 | | |
| Second Quarter (commencing April 6, 2000) | $27.63 | $ 7.13 |
| Third Quarter | $49.63 | $26.88 |
| Fourth Quarter | $36.25 | $11.13 |
| Year ended December 31, 2001 | | |
| First Quarter (through March 15, 2001) | $24.69 | $11.00 |

**Holders**

As of February 29, 2001 there were approximately 114 stockholders of record of Sangamo's common stock.

**Dividends**

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

**Use of Proceeds from the Sale of Registered Securities**

Sangamo's Registration Statement on Form S-1 with respect to our initial public offering was declared effective on April 6, 2000. In a public offering managed by Lehman Brothers, Chase H&Q, ING Barings, and William Blair & Company, Sangamo registered and sold an aggregate of 3.5 million shares of our common stock at a public offering price of $15.00 per share for an aggregate offering of $52.5 million of common stock.

Sangamo received net proceeds of approximately $47.4 million after deducting offering expenses of $5.1 million including underwriting discounts and commissions of $3.7 million and other offering expenses of $1.4 million. The following table sets forth an estimate of all expenses incurred in connection with the offering, other than underwriting discounts and commissions. All amounts shown are estimated except for the registration fees of the SEC and the National Association of Securities Dealers, Inc. ("NASD").

| | |
|---|---|
| SEC Registration fee | $ 27,800 |
| NASD filing fee | 12,000 |
| NASDAQ National Market listing fee | 95,000 |
| Printing and engraving expenses | 400,000 |
| Legal fees and expenses | 500,000 |
| Accounting fees and expenses | 300,000 |
| Blue Sky fees and expenses | 10,000 |
| Transfer Agent and Registrar fees | 25,000 |
| Miscellaneous | 30,200 |
| Total | $1,400,000 |

None of the offering expenses represented direct or indirect payments to directors, officers or general partners of the Sangamo or their associates, to persons owning 10 percent or more of any class of equity securities of Sangamo or to affiliates of the Sangamo.

As of March 15, 2001, Sangamo has used the net proceeds from its public offering of common stock to invest in short-term and long-term, interest bearing, investment grade securities and has used its existing cash balances to fund the general operations of the company. Sangamo intends to use the net proceeds of the offering for research and development and general corporate purposes and is currently assessing the specific uses and allocations for these funds. A portion of the net proceeds may also be used to acquire or invest in complementary business or products or to obtain the right to use complementary technologies. Sangamo has no agreements or commitments with respect to any such acquisition or investments and Sangamo is not currently engaged in any material negotiations with respect to any such transaction. None of the net proceeds of the offering is expected to be paid directly or indirectly to directors, officers or general partners of the company or their associates, to persons owning 10 percent or more of any class of equity securities of the company or to affiliates of the company.

**Item 6. Selected Consolidated Financial Data**

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

**SELECTED FINANCIAL DATA**

| | Year Ended December 31, | | | | |
|---|---|---|---|---|---|
| | 2000 | 1999 | 1998 | 1997 | 1996 |
| | (in thousands, except per share data) | | | | |
| **Statement of Operations Data:** | | | | | |
| Total revenues | $ 3,433 | $ 2,182 | $ 2,038 | $ 1,152 | $ 632 |
| Operating expenses: | | | | | |
| Research and development* | 11,347 | 4,266 | 4,259 | 1,700 | 628 |
| General and administrative* | 4,569 | 1,822 | 1,237 | 797 | 322 |
| Total operating expenses | 15,916 | 6,088 | 5,496 | 2,497 | 950 |
| Loss from operations | (12,483) | (3,906) | (3,458) | (1,345) | (318) |
| Interest income (expense), net | 3,417 | 131 | 173 | (55) | 10 |
| Net loss | (9,066) | (3,775) | (3,285) | (1,400) | (308) |
| Deemed dividend upon issuance of convertible preferred stock | (1,500) | (4,500) | — | — | — |
| Net loss attributable to common stockholders | $(10,566) | $(8,275) | $(3,285) | $(1,400) | $ (308) |
| Basic and diluted net loss per common share | $ (0.61) | $ (1.38) | $ (0.56) | $ (0.26) | $(0.06) |
| Shares used in computing basic and diluted net loss per common share | 17,383 | 5,991 | 5,843 | 5,485 | 5,143 |

* Included in operating expenses were the following deferred compensation charges for each year (for more information, see section entitled "Stock-Based Compensation" in footnotes to financial statements):

| | 2000 | 1999 | 1998 | 1997 | 1996 |
|---|---|---|---|---|---|
| **Deferred Compensation:** | | | | | |
| Research and development deferred compensation | $2,885 | $275 | $202 | $ 25 | $— |
| General and administrative deferred compensation | 1,967 | 244 | 208 | 352 | — |
| Total deferred compensation | $4,852 | $519 | $410 | $377 | $— |

## SELECTED FINANCIAL DATA (Continued)

| | As of December 31, | | | | |
|---|---|---|---|---|---|
| | 2000 | 1999 | 1998 | 1997 | 1996 |
| | (in thousands) | | | | |
| **Balance Sheet Data:** | | | | | |
| Cash, cash equivalents and investments | $ 64,681 | $7,503 | $ 3,058 | $ 6,314 | $ 358 |
| Working capital | 64,477 | 7,206 | 3,161 | 6,233 | 434 |
| Total assets | 68,925 | 9,162 | 4,032 | 6,896 | 539 |
| Long-term debt | — | 250 | 250 | — | — |
| Accumulated deficit | (17,851) | (8,785) | (5,010) | (1,725) | (325) |
| Total stockholders' equity | 66,890 | 7,882 | 3,404 | 6,409 | 434 |

### QUARTERLY FINANCIAL DATA (UNAUDITED)

The following table sets forth certain unaudited quarterly financial data for the eight quarters ending December 31, 2000. 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 1999 | | | | Fiscal Year 2000 | | | |
|---|---|---|---|---|---|---|---|---|
| | Q1 | Q2 | Q3 | Q4 | Q1* | Q2* | Q3 | Q4 |
| Revenues | $ 463 | $ 488 | $ 630 | $ 601 | $ 807 | $ 747 | $ 823 | $1,056 |
| Expenses | 1,491 | 1,341 | 1,232 | 2,024 | 3,595 | 3,459 | 3,928 | 4,934 |
| Net loss | (1,007) | (835) | (578) | (1,355) | (2,718) | (1,725) | (1,818) | (2,805) |
| Net loss applicable to common | (1,007) | (835) | (578) | (5,855) | (4,218) | (1,725) | (1,818) | (2,805) |
| Net loss per share attributable to common** | (0.17) | (0.14) | (0.10) | (0.96) | (0.71) | (0.08) | (0.08) | (0.13) |

* Net loss per share is calculated on the basis of common shares outstanding at the end of each quarter.

** The company completed its initial public offering on April 6, 2000, and converted all preferred shares to common on the same day. Accordingly, the net loss per share beginning in Q2 2000 reflects the additional shares outstanding as of that date.

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

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, 2000, our activities related primarily to establishing a research and development organization and developing relationships with our corporate collaborators. We have incurred net losses since inception and expect to incur losses in the future as we expand 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, 2000, we had an accumulated deficit of $17.9 million.

Our revenues consist primarily of revenues from our corporate partners for ZFP TFs, federal government research grant funding, and payments from strategic partners for committed research funding and research milestone payments.

Research and development expenses consist primarily of salaries and related personnel expenses, subcontracted research expenses, and technology license expenses. As of December 31, 2000, all research and development costs have been 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 in the future as we continue to develop our Universal Gene Recognition™ technology platform.

General and administrative expenses consist primarily of salaries and related personnel expenses for executive, finance and administrative personnel, professional fees, and other general corporate expenses. As we add personnel and incur additional costs related to the growth of our business, general and administrative expenses will also increase.

**Deferred Stock Compensation**

During the years ended December 31, 2000, 1999 and 1998, in connection with the grant of stock options to employees and directors, Sangamo recorded deferred stock compensation totaling $6.8 million, $1.5 million and $780,000, respectively, representing the difference between the fair value of common stock on the date such options were granted and the exercise price. These amounts are included as a reduction of stockholders' equity and are being amortized over the vesting period of the individual options, generally four years, using an accelerated vesting method. The accelerated vesting method provides for vesting of portions of the overall award at interim dates and results in higher vesting in earlier years than straight-line vesting. The fair value of Sangamo common stock for purposes of this calculation was determined based on the business factors underlying the value of common stock on the date such option grants were made. Sangamo recorded amortization of deferred stock compensation of $3.8 million, $519,000, and $410,000 for the years ended December 31, 2000, 1999 and 1998, respectively. During the twelve months ended December 31, 2000, Sangamo also recognized compensation expense related to options granted to directors and consultants. Such options are valued based on the fair value of the Sangamo's common stock when the options vest. During the twelve months ended December 31, 2000, compensation charges of $1.0 million were recorded for options granted to consultants. At December 31, 2000, Sangamo had a total of $4.7 million remaining to be amortized over the vesting periods of the employee stock options.

**Deemed Dividend Upon Issuance of Convertible Preferred Stock**

In November 1999, we sold 1,000,000 shares of Series C convertible preferred stock to an investor for net proceeds of $4.5 million. Subsequent to the commencement of the initial public offering process, Sangamo re-evaluated the fair value of its common stock as of November 1999 and determined it to be $6.00 per share. Accordingly, the incremental fair value, limited to the amount of the proceeds received of $4.5 million, is deemed to be the equivalent of a preferred stock dividend. Sangamo recorded the deemed dividend at the date of issuance by offsetting charges and credits to preferred stock, without any effect on total stockholders' equity. The preferred stock dividend increases the loss applicable to common stockholders in the calculation of basic net loss per share for the year ended December 31, 1999.

In January 2000, we sold an additional 333,333 shares of its Series C convertible preferred stock for net proceeds of $1.5 million and similarly recorded a deemed dividend of $1.5 million. The preferred stock dividend increases the loss applicable to common stockholders in the calculation of basic net loss per share for the year ended December 31, 2000.

**Results of Operations**

*Years Ended December 31, 2000, 1999 and 1998*

*Total revenues.* Total revenues consisted of revenues from collaboration agreements, strategic partnerships and federal government research grants. Revenues from our corporate collaboration and strategic partnering agreements were $2.7 million in 2000, compared with $1.0 million and $150,000 during 1999 and 1998, respectively. The increase in 2000 was principally attributable to revenues recognized from a therapeutics partnership signed with Edwards Lifesciences Corporation in January 2000, as well as incremental Universal GeneTools™ agreements signed during the year. The increase in 1999 was principally attributable to revenues recognized from collaboration agreements signed since the third quarter of 1998. We expect revenues from collaboration agreements and strategic partnerships to continue to increase as additional agreements are signed or existing agreements are expanded. Federal government research grant revenues were $688,000 in 2000, $1.2 million in 1999, and $1.9 million in 1998. The decrease in 2000 and 1999 was principally due to an increased focus on corporate collaborations as some existing federal research government grants ended. We plan to continue to apply for federal government research grants.

*Research and development expenses.* Research and development expenses were $11.3 million for 2000, as compared to $4.3 million for 1999 and 1998. The increase in 2000 was primarily due to the company increasing its headcount from 31 persons at the end of 1999 to a total of 66 at the end of 2000, thereby increasing personnel and associated laboratory supply costs. Headcount increases were predominately for research personnel. Of the total expenses in 2000, $3.9 million was related to non-cash items, including $2.9 million in deferred compensation expense, and a $1.0 million charge related to the licensing of certain in-process technology, as compared to a total of $275,000 and $202,000 in non-cash deferred compensation charges in the same period of 1999 and 1998, respectively. Research and development expenses were $4.3 million for 1999 and 1998 as reductions in laboratory supplies and equipment expenses were offset by increases in stock compensation expense. We expect research and development expenses to increase significantly in future periods, particularly as we increase the scientific staff to continue to develop the Universal Gene Recognition™ technology and to meet the needs of our Universal GeneTools™ collaborators and strategic partners.

*General and administrative expenses.* General and administrative expenses were $4.6 million in 2000 compared to $1.8 million and $1.2 million for the years ended December 31, 1999 and 1998, respectively. Included in the total expenses were non-cash deferred compensation expense of $2.0 million in 2000, as compared to $244,000 and $208,000 in 1999 and 1998, respectively. The increase from 1999 to 2000 was due to additional costs associated with being a public company, as well as incremental personnel costs to support our expanded research and development activities and development of our Universal Gene Recognition™ technology. The increase from 1998 to 1999 was primarily attributable to increased staffing costs. We expect that general and administrative expenses will increase in the future to support continued growth of our research and development efforts.

*Interest income (expense), net.* Interest income (expense), net was $3.4 million in 2000 as compared to $131,000 and $173,000 in 1999 and 1998, respectively. The change in net interest income in 2000 reflects the higher cash balances resulting from our initial public offering and our therapeutics partnership with Edwards Lifesciences Corporation. The decrease in interest income between 1998 and 1999 resulted from lower average interest-bearing balances and higher debt balances during 1999.

We incurred net operating losses in 2000, 1999, and 1998 and consequently we did not pay any federal, state or foreign income taxes.

**Liquidity and Capital Resources**

Since inception, we have financed our operations primarily through the sale of equity securities, federal government research grants, payments from corporate collaborators and financing activities such as a bank line of credit. As of December 31, 2000, we had cash, cash equivalents, investments and interest receivable totaling $64.7 million.

Net cash used in operating activities was $2.6 million for 2000, $2.5 million for 1999, and $3.2 million in 1998. In all periods, net cash used in operating activities was primarily due to funding of net operating losses.

Net cash used in investing activities was $49.0 million in 2000, $6.0 million in 1999, and $2.2 million in 1998. Cash was used during these periods to purchase investments and property and equipment.

Net cash provided by financing activities during 2000 was $61.3 million, primarily as a result of the company's initial public offering as well as proceeds received from its strategic partnership with Edwards Lifesciences Corporation. Net cash provided by financing activities in 1999 was $7.5 million as a result of the private placement of preferred stock. Net cash provided by financing activities in 1998 was $253,000 primarily representing the proceeds from a bank note payable used to finance equipment purchases.

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 for at least two years. We may need to raise substantial additional capital to fund subsequent operations and there can be no assurance that such funds will be available on acceptable terms, if at all.

As of December 31, 2000, we had federal and state net operating loss carryforwards of approximately $11 million and $400,000, respectively, to offset future taxable income. We also had federal research and development tax credit carryforwards of approximately $770,000. If not used, net operating loss and credit carryforwards will begin to expire in 2010. Use of the net operating losses and credits may be subject to a substantial annual limitation due to ownership change limitations provided by the Internal Revenue Code of 1986. The annual limitation may result in the expiration of our net operating losses and credits before they can be used. Also, if we do not become profitable, we will not be able to use these net operating losses and credits.

**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 satisfy liquidity requirements by investing 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 1 percent from December 31, 2000, 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.

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

## SANGAMO BIOSCIENCES, INC.
## INDEX TO FINANCIAL STATEMENTS

## REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

The Board of Directors and Stockholders
Sangamo BioSciences, Inc.

We have audited the accompanying balance sheets of Sangamo BioSciences, Inc. as of December 31, 2000 and 1999, and the related statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2000. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Sangamo BioSciences, Inc. at December 31, 2000 and 1999, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2000, in conformity with accounting principles generally accepted in the United States.

Ernst & Young LLP

Palo Alto, California
January 26, 2001

**SANGAMO BIOSCIENCES, INC.**

**BALANCE SHEETS**

**(In thousands, except share and per share amounts)**

| | December 31, 2000 | December 31, 1999 |
|---|---|---|
| **Assets** | | |
| Current assets: | | |
| Cash and cash equivalents | $ 10,151 | $ 251 |
| Marketable securities | 53,359 | 7,252 |
| Interest receivable | 1,171 | — |
| Accounts receivable | 1,506 | 562 |
| Prepaid expenses | 325 | 171 |
| Total current assets | 66,512 | 8,236 |
| Property and equipment, net | 1,982 | 612 |
| Other assets | 431 | 314 |
| Total assets | $ 68,925 | $9,162 |
| **Liabilities and stockholders' equity** | | |
| Current liabilities: | | |
| Accounts payable and accrued liabilities | $ 634 | $ 348 |
| Accrued compensation and employee benefits | 696 | 182 |
| Deferred revenue | 705 | 500 |
| Total current liabilities | 2,035 | 1,030 |
| Note payable | — | 250 |
| Stockholders' equity: | | |
| Convertible preferred stock, $0.01 par value; 5,000,000 shares authorized, issuable in series, -0- and 4,855,917 shares issued and outstanding at December 31, 2000 and 1999, respectively | — | 15,187 |
| Common stock, $0.01 par value; 80,000,000 shares authorized, 22,147,391 and 6,132,060 shares issued and outstanding at December 31, 2000 and 1999, respectively | 89,764 | 3,258 |
| Note receivable from stockholder | (463) | (125) |
| Deferred stock compensation | (4,697) | (1,736) |
| Accumulated deficit | (17,851) | (8,785) |
| Accumulated other comprehensive income | 137 | 83 |
| Total stockholders' equity | 66,890 | 7,882 |
| Total liabilities and stockholders' equity | $ 68,925 | $9,162 |

See accompanying notes.

**SANGAMO BIOSCIENCES, INC.**

**STATEMENTS OF OPERATIONS**

**(In thousands, except per share amounts)**

| | Year ended December 31, | | |
|---|---|---|---|
| | **2000** | **1999** | **1998** |
| Revenues: | | | |
| Federal government research grants | $ 688 | $ 1,182 | $ 1,888 |
| Collaboration agreements | 2,745 | 1,000 | 150 |
| Total revenues | 3,433 | 2,182 | 2,038 |
| Operating expenses: | | | |
| Research and development (includes charges for stock compensation of $2,885, $275 and $202 for 2000, 1999 and 1998, respectively) | 11,347 | 4,266 | 4,259 |
| General and administrative (includes charges for stock compensation of $1,967, $244 and $208 for 2000, 1999 and 1998, respectively) | 4,569 | 1,822 | 1,237 |
| Total operating expenses | 15,916 | 6,088 | 5,496 |
| Loss from operations | (12,483) | (3,906) | (3,458) |
| Interest income | 3,556 | 148 | 185 |
| Interest expense | (139) | (17) | (12) |
| Net loss | (9,066) | (3,775) | (3,285) |
| Deemed dividend upon issuance of convertible preferred stock | (1,500) | (4,500) | — |
| Net loss attributable to common stockholders | $(10,566) | $(8,275) | $(3,285) |
| Basic and diluted net loss per common share | $ (0.61) | $ (1.38) | $ (0.56) |
| Shares used in computing basic and diluted net loss per common share | 17,383 | 5,991 | 5,843 |

See accompanying notes.

## SANGAMO BIOSCIENCES, INC.
## STATEMENT OF STOCKHOLDERS' EQUITY
## (In thousands, except share and per share amounts)

| | Convertible Preferred Stock | | Common Stock | | Note Receivable from | Deferred Stock | | Accumulated Other | Total |
|---|---|---|---|---|---|---|---|---|---|
| | Shares | Amount | Shares | Amount | Stockholder | Compensation | Accumulated Deficit | Comprehensive Income | Stockholders' Equity |
| Balances at December 31, 1997 | 3,108,000 | $ 7,743 | 5,876,300 | $ 794 | — | $ (403) | $ (1,725) | — | $ 6,409 |
| Issuance of common stock upon exercise of options | — | — | 54,718 | 2 | — | — | — | — | 2 |
| Issuance of preferred stock for services rendered | 40,000 | — | — | — | — | — | — | — | — |
| Issuance of note receivable to stockholder | — | — | — | — | (250) | — | — | — | (250) |
| Forgiveness of note receivable to stockholder | — | — | — | — | 63 | — | — | — | 63 |
| Deferred stock compensation | — | — | — | 780 | — | (780) | — | — | — |
| Amortization of deferred stock compensation | — | — | — | — | — | 410 | — | — | 410 |
| Comprehensive loss: | | | | | | | | | |
| Unrealized gain on investments | — | — | — | — | — | — | — | 55 | 55 |
| Net loss | — | — | — | — | — | — | (3,285) | — | (3,285) |
| Comprehensive loss | | | | | | | | | (3,230) |
| Balances at December 31, 1998 | 3,148,000 | 7,743 | 5,931,018 | 1,576 | (187) | (773) | (5,010) | 55 | 3,404 |
| Issuance of common stock upon exercise of options | — | — | 191,042 | 12 | — | — | — | — | 12 |
| Issuance of common stock and options to purchase common stock for services rendered | — | — | 10,000 | 188 | — | — | — | — | 188 |
| Issuance of preferred stock upon exercise of warrants | 41,250 | — | — | — | — | — | — | — | — |
| Issuance of preferred stock, net of issuance costs of $56 | 1,666,667 | 7,444 | — | — | — | — | — | — | 7,444 |
| Forgiveness of note receivable to stockholder | — | — | — | — | 62 | — | — | — | 62 |
| Deferred stock compensation | — | — | — | 1,482 | — | (1,482) | — | — | — |
| Amortization of deferred stock compensation | — | — | — | — | — | 519 | — | — | 519 |
| Comprehensive loss: | | | | | | | | | |
| Unrealized gain on investments | — | — | — | — | — | — | — | 28 | 28 |
| Net loss | — | — | — | — | — | — | (3,775) | — | (3,775) |
| Comprehensive loss | | | | | | | | | (3,747) |
| Balances at December 31, 1999 | 4,855,917 | 15,187 | 6,132,060 | 3,258 | (125) | (1,736) | (8,785) | 83 | 7,882 |
| Issuance of common stock upon exercise of options and warrants, net of repurchases | — | — | 1,156,192 | 706 | — | — | — | — | 706 |
| Issuance of common stock for services rendered | — | — | 72,062 | 1,081 | — | — | — | — | 1,081 |
| Issuance of preferred stock upon exercise of warrants | 28,158 | 61 | — | — | — | — | — | — | 61 |
| Issuance of preferred stock | 333,333 | 1,500 | — | — | — | — | — | — | 1,500 |
| Conversion of preferred stock into common stock | (5,217,408) | (16,748) | 10,434,816 | 16,748 | — | — | — | — | — |
| Conversion of notes payable and interest into common stock | — | — | 842,454 | 12,637 | — | — | — | — | 12,637 |
| Issuance of common stock in initial public offering, net of issuance costs of $5,104 | — | — | 3,500,000 | 47,396 | — | — | — | — | 47,396 |
| Issuance of common stock under employee stock purchase plan | — | — | 9,807 | 125 | — | — | — | — | 125 |
| Forgiveness of note receivable to stockholder | — | — | — | — | 62 | — | — | — | 62 |
| Issuance of note receivable to stockholder | — | — | — | — | (400) | — | — | — | (400) |
| Deferred stock compensation | — | — | — | 6,778 | — | (6,778) | — | — | — |
| Amortization of deferred stock compensation and vesting of non-qualified stock options | — | — | — | 1,035 | — | 3,817 | — | — | 4,852 |
| Comprehensive loss: | | | | | | | | | |
| Unrealized gain on investments | — | — | — | — | — | — | — | 54 | 54 |
| Net loss | — | — | — | — | — | — | (9,066) | — | (9,066) |
| Comprehensive loss | | | | | | | | | (9,012) |
| Balances at December 31, 2000 | — | $ — | 22,147,391 | $89,764 | $(463) | $(4,697) | $(17,851) | $137 | $66,890 |

See accompanying notes.

**SANGAMO BIOSCIENCES, INC.**

**STATEMENTS OF CASH FLOWS**

**Increase (Decrease) in Cash and Cash Equivalents**

**(In thousands)**

| | Year ended December 31, | | |
|---|---|---|---|
| | 2000 | 1999 | 1998 |
| **Operating activities:** | | | |
| Net loss | $(9,066) | $(3,775) | $(3,285) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | | |
| Depreciation and amortization | 380 | 164 | 86 |
| Non-cash interest expense | 137 | — | — |
| Amortization of deferred stock compensation | 4,852 | 519 | 410 |
| Issuance of common stock and options to purchase common stock for technology and services rendered | 1,081 | 188 | — |
| Changes in operating assets and liabilities: | | | |
| Accounts receivable | (944) | (178) | 20 |
| Prepaid expenses and other assets | 101 | (14) | (284) |
| Accounts payable and accrued liabilities | 286 | 166 | (305) |
| Accrued compensation and employee benefits | 514 | (14) | 196 |
| Deferred revenue | 205 | 500 | — |
| Net cash used in operating activities | (2,454) | (2,444) | (3,162) |
| **Investing activities:** | | | |
| Purchases of marketable securities | (54,530) | (8,242) | (2,921) |
| Maturities to and other changes in marketable securities | 7,306 | 2,571 | 1,166 |
| Purchases of property and equipment | (1,750) | (340) | (400) |
| Net cash used in investing activities | (48,974) | (6,011) | (2,155) |
| **Financing activities:** | | | |
| Proceeds from issuance of convertible preferred stock | 1,561 | 7,444 | — |
| Proceeds from issuance of common stock | 48,227 | 12 | 3 |
| Borrowings (repayment) of note payable | (250) | — | 250 |
| Proceeds from issuance of convertible notes | 12,500 | — | — |
| Note receivable from stockholder | (710) | — | — |
| Net cash provided by financing activities | 61,328 | 7,456 | 253 |
| Net increase in cash and cash equivalents | 9,900 | (999) | (5,064) |
| Cash and cash equivalents, beginning of period | 251 | 1,250 | 6,314 |
| Cash and cash equivalents, end of period | $10,151 | $ 251 | $ 1,250 |
| **Supplemental disclosures:** | | | |
| Cash paid for interest | $ 2 | $ 17 | $ 12 |
| **Noncash investing and financing activities:** | | | |
| Deferred compensation related to stock options | $ 6,778 | $ 1,482 | $ 780 |
| Deemed dividend upon issuance of convertible preferred stock | $ 1,500 | $ 4,500 | $ — |
| Conversion of convertible notes payable and accrued interest into common stock | $12,637 | $ — | $ — |

See accompanying notes.

## SANGAMO BIOSCIENCES, INC.
## NOTES TO FINANCIAL STATEMENTS

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

#### Sangamo and Basis of Presentation

Sangamo BioSciences, Inc. ("Sangamo") was incorporated in the State of Delaware on June 22, 1995 and is focused on the development and commercialization of novel transcription factors for the regulation of gene expression. Sangamo's Universal Gene Recognition™ technology platform enables the engineering of a class of transcription factors known as zinc finger DNA-binding proteins ("ZFPs"). Sangamo will require additional financial resources to complete the development and commercialization of its products.

Sangamo anticipates 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. Sangamo plans to finance its operations with available cash resources, funds received under federal government research grants and Universal GeneTools™ collaborations and strategic partnerships, and from the issuance of equity or debt securities. Sangamo believes that its available cash, cash equivalents and investments as of December 31, 2000, along with expected revenues from Universal GeneTools™ collaborations and strategic partnerships, will be adequate to fund its operations through at least fiscal 2002. Sangamo will need to raise substantial additional capital to fund subsequent operations. Sangamo intends to seek funding through the issuance of equity securities, additional Universal GeneTools™ collaborations, strategic partnerships, and federal government research grants. 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.

#### Use of Estimates

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 equivalents of $10.2 million and $251,000 at December 31, 2000 and 1999, respectively, consist of a certificate of deposit and deposits in money market investment accounts.

#### Marketable Securities

Sangamo classifies its marketable securities as "available-for-sale" and records its investments at market value in accordance with Statement of Financial Accounting Standards ("SFAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities." Available-for-sale securities are carried at amounts that approximate fair market 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 interest income. Interest on securities classified as available-for-sale is also included in interest income, which is determined using the specific identification method. Through December 31, 2000, Sangamo has no other than temporary losses on its investments.

**1. Organization and Summary of Significant Accounting Policies (Continued)**

The table below summarizes the carrying value and the fair value at December 31, 2000 and 1999 of our investments. The fair value of the investments was based on the quoted market price at year-end (in thousands):

| December 31, 2000 | Amortized Cost | Gross Unrealized Gains | Estimated Fair Value |
|---|---|---|---|
| US government investments: | | | |
| Maturing within 1 year | $2,021 | $ 2 | $2,023 |
| Maturing between 1 and 2 years | 4,510 | 5 | 4,515 |
| Total government investments | 6,531 | 7 | 6,538 |
| Corporate debt investments: | | | |
| Maturing within 1 year | 34,500 | 44 | 34,544 |
| Maturing between 1 and 2 years | 13,363 | 85 | 13,448 |
| Total corporate investments | 47,863 | 129 | 47,992 |
| Total available-for-sale investments | 54,394 | 137 | 54,530 |
| **December 31, 1999** | | | |
| Corporate debt investments: | | | |
| Maturing within 1 year | $6,918 | $83 | $7,001 |
| Certificate of deposit | 251 | — | 251 |
| Total available-for-sale investments | $7,169 | $83 | $7,252 |

**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. Sangamo has not internally developed any software for use in its research activities.

**Comprehensive Income**

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Comprehensive loss for the years ended December 31, 2000, 1999 and 1998 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 and losses on investments.

**Revenue Recognition**

Sangamo recognizes revenue from its Universal GeneTools™ agreements when ZFP Transcription Factors ("ZFP TFs") are delivered to the Universal GeneTools™ collaborators and persuasive evidence of an agreement exists, the price is fixed and determinable, and collectibility is reasonably assured.

**1. Organization and Summary of Significant Accounting Policies (Continued)**

Generally, Sangamo receives partial payments from these collaborations prior to the delivery of ZFP TFs and the recognition of these revenues are deferred until the ZFP TFs are delivered. The risk of ownership has passed to the collaborator and all performance obligations have been satisfied at the time revenue is recognized.

Payments to fund research activities made under strategic partnering agreements are recognized over the period that Sangamo performs research services. Amounts paid in advance under such agreements are deferred until the research services are performed. Sangamo's federal government research grants 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 received on a quarterly or monthly basis and are subject to the issuing agency's right of audit.

**Research and Development Costs**

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 and 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 SFAS No. 123, "Accounting for Stock-Based Compensation" ("SFAS 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 expenses to be recorded as they vest over a performance period. The fair value of such options is determined using the Black-Scholes model.

**Income Taxes**

Sangamo accounts for income taxes as required by SFAS No. 109, "Accounting for Income Taxes." Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates and laws that will be in effect when the differences are expected to reverse.

**Net Loss Per Share**

Basic and diluted net loss per share information for all periods is presented under the requirements of SFAS 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

**1. Organization and Summary of Significant Accounting Policies (Continued)**

shares subject to repurchase. 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, | | |
|---|---|---|---|
| | 2000 | 1999 | 1998 |
| Net loss attributable to common stockholders | $(10,566) | $(8,275) | $(3,285) |
| Basic and diluted: | | | |
| Weighted-average shares of common stock outstanding | 17,877 | 6,053 | 5,919 |
| Less: weighted-average shares subject to repurchase | (494) | (62) | (76) |
| Shares used in computing basic and diluted net loss per common share | 17,383 | 5,991 | 5,843 |
| Basic and diluted net loss per common share | $ (0.61) | $ (1.38) | $ (0.56) |

**Major Customers**

During 2000, Sangamo entered into Universal GeneTools™ agreements with six pharmaceutical and biotechnology companies, bringing the total number of Universal GeneTools™ partnerships to twenty-two. Sangamo earned revenues of $1.8 million under eleven of these agreements during the year. At December 31, 2000, Sangamo's accounts receivable consisted of amounts due from six of these pharmaceutical companies. These agreements generally require Sangamo to apply its research expertise and technology to develop unique transcription factors, which are delivered to the pharmaceutical companies for use in their research.

**Strategic Partnership**

In January 2000, Sangamo entered into a strategic partner agreement with Edwards Lifesciences Corporation, formerly the CardioVascular Group of Baxter Healthcare Corporation for the development of ZFP TFs in cardiovascular and peripheral vascular diseases. Under this agreement, Edwards purchased a $5 million convertible note which converted into common stock at the time of the company's initial public offering at the IPO price, and Sangamo received $1 million in initial research funding from Edwards which was recorded as deferred revenue and is being recognized as revenue as related research services are performed over the research period of one year. Through December 31, 2000, Sangamo has substantially met all of the research goals associated with the initial research plan outline and has recognized revenue of approximately $945,000. 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. This note also converted into common stock upon consummation of the Company's initial public offering at the IPO price. In the future, Sangamo may receive option fees, milestone payments, royalties and additional research funding from this agreement.

**Effect of New Accounting Standards**

In June 1998, the Financial Accounting Standards Board issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133"), as amended, which must be adopted by Sangamo as of January 1, 2001. SFAS 133 establishes accounting and reporting standards requiring that

**1. Organization and Summary of Significant Accounting Policies (Continued)**

every derivative instrument, including derivative instruments imbedded in other contracts, be recorded in the balance sheet as either an asset or liability measured at its fair value. SFAS 133 also requires that changes in the derivative's fair value be recognized in earnings unless specific hedge accounting criteria are met. Sangamo believes the adoption of SFAS 133 will not have a material effect on the financial statements, since it currently does not hold derivative instruments or engage in hedging activities.

**2. Property and Equipment**

Property and equipment consist of the following:

| | December 31, | |
|---|---|---|
| | 2000 | 1999 |
| | (in thousands) | |
| Laboratory equipment | $1,314 | $436 |
| Furniture and fixtures | 477 | 227 |
| Leasehold improvements | 823 | 201 |
| | 2,614 | 864 |
| Less accumulated depreciation and amortization | (632) | (252) |
| | $1,982 | $612 |

**3. Commitments and Notes Payable**

Sangamo occupies office and laboratory space under operating leases in Richmond, California that expire in 2004. Rent expense for 2000, 1999 and 1998 was $392,000, $336,000, and $314,000 respectively. Future minimum payments under non-cancelable operating leases at December 31, 2000 consist of the following:

| | Amount |
|---|---|
| | (in thousands) |
| 2001 | 430 |
| 2002 | 438 |
| 2003 | 442 |
| 2004 | 297 |
| | $1,607 |

**4. Stockholders' Equity**

**Convertible Preferred Stock**

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

In November 1999, Sangamo sold 1,000,000 shares of its Series C convertible preferred stock to an investor for net proceeds of $4.5 million. Subsequent to the commencement of the initial public

**4. Stockholders' Equity (Continued)**

offering process, Sangamo re-evaluated the fair value of its common stock as of November 1999 and determined it to be $6.00 per share. Accordingly, the incremental fair value, limited to the amount of the proceeds received of $4.5 million, was deemed to be the equivalent of a preferred stock dividend. Sangamo recorded the deemed dividend at the date of issuance by offsetting charges and credits to preferred stock, without any effect on total stockholders' equity. The preferred stock dividend increases the loss applicable to common stockholders in the calculation of basic net loss per share for the year ended December 31, 1999.

In January 2000, Sangamo sold 333,333 shares of its Series C convertible preferred stock for net proceeds of approximately $1.5 million. Subsequent to the commencement of the initial public offering process, Sangamo re-evaluated the fair value of its common stock as of January 2000 and determined it to be $12 per share. Accordingly, the incremental fair value, limited to the amount of the proceeds received of $1.5 million, was deemed to be the equivalent of a preferred stock dividend. Sangamo recorded the deemed dividend at the date of issuance by offsetting charges and credits to preferred stock, without any effect on total stockholders' equity. The preferred stock dividend increases the loss applicable to common stockholders in the calculation of basic net loss per share for the year ended December 31, 2000.

**Common Stock**

At December 31, 2000, 374,583 shares of outstanding common stock were subject to the company's contractual right of repurchase at a weighted average price of $0.15 which rights generally lapse over periods not exceeding four years.

**Warrants**

At December 31, 2000, warrants to purchase 74,570 shares of common stock were outstanding at an exercise price of $1.50 per share, and are exercisable through August 2002. The warrants to purchase common stock were issued in connection with a 1997 bridge loan transaction. Sangamo has reserved common stock for issuance upon exercise of the warrants.

**Stock Split**

In February 2000, the Board of Directors adopted, subject to stockholder approval (which was received in March 2000), a change in the authorized number of shares of the common stock and preferred stock to 80,000,000 and 5,000,000, respectively. An Amended and Restated Certificate of Incorporation was filed following the effectiveness of the registration statement relating to the public offering. On March 28, 2000, Sangamo effected a two-for-one stock split of its common stock, in the form of a common stock dividend. As a result of the common stock split, the conversion ratio of Sangamo's convertible preferred stock was amended to two-to-one pursuant to Sangamo's Sixth Amended and Restated Certificate of Incorporation. All common share and options and per share amounts in the accompanying financial statements have been adjusted to reflect the stock split.

**Stock Option Plan**

Sangamo's 2000 Stock Option Plan (the "2000 Option Plan"), which supersedes the 1995 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

**4. Stockholders' Equity (Continued)**

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, 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 2000 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 2000 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 3.7 million shares were reserved for issuance pursuant to the 2000 Option Plan. The number of shares authorized for issuance will automatically increase on the first trading day of the fiscal year by an amount equal to 3.5 percent of the total number of shares of our common stock outstanding on the last trading day of the preceding fiscal year.

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, 1997 | 94,500 | 983,000 | $0.08 |
| Additional shares authorized | 1,200,000 | — | — |
| Options granted | (828,000) | 828,000 | $0.16 |
| Options exercised | — | (101,750) | $0.03 |
| Shares repurchased | 47,032 | — | $0.01 |
| Options canceled | 35,250 | (35,250) | $0.08 |
| Balance at December 31, 1998 | 548,782 | 1,674,000 | $0.12 |
| Additional shares authorized | 1,000,000 | — | — |
| Options granted | (463,500) | 463,500 | $0.22 |
| Options exercised | — | (191,042) | $0.06 |
| Options canceled | 69,792 | (69,792) | $0.10 |
| Balance at December 31, 1999 | 1,155,074 | 1,876,666 | $0.15 |
| Additional shares authorized | 1,603,926 | — | — |
| Options granted | (1,173,900) | 1,173,900 | $8.18 |
| Options exercised | — | (1,120,350) | $0.59 |
| Shares repurchased | 10,734 | — | $0.63 |
| Options canceled | 39,933 | (39,933) | $0.83 |
| Balance at December 31, 2000 | 1,635,767 | 1,890,283 | $4.86 |

Options outstanding at December 31, 2000 have a weighted average remaining contractual life of 7.2 years and may be immediately exercised; however, 1.7 million shares issued pursuant to the exercise of these options would be subject to Sangamo's right of repurchase. Vested options at December 31, 2000 total 1.8 million and have a weighted average remaining contractual life of 6.3 years. The

**4. Stockholders' Equity (Continued)**

weighted-average fair value per share of options granted during 1998, 1999 and 2000 was $1.08, $5.06 and $8.18, respectively.

The following table summarizes information with respect to stock options outstanding at December 31, 2000:

| Options Outstanding | | |
|---|---|---|
| Range of Exercise Price | Number of Shares | Weighted Average Remaining Contractual Life (In Years) |
| $0.15-$0.22 | 1,020,633 | 5.71 |
| $2.25-$8.50 | 473,500 | 9.21 |
| $11.13-$38.00 | 396,150 | 9.93 |
| | 1,890,283 | |

As permitted by SFAS 123, Sangamo accounts for its stock option and stock incentive plans in accordance with APB 25 and recognizes no deferred 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, 1999 and 1998, Sangamo granted options to employees with exercise prices below the fair value of Sangamo's common stock. Such fair value was determined based on the business factors underlying the value of the company's common stock on the date such option grants were made, viewed in light of the company's planned initial public offering and the expected initial public offering price per share. Accordingly, the Company recognized deferred stock compensation of $6.8 million, $1.5 million and $780,000 in 2000, 1999 and 1998, respectively, which is being amortized to expense over the vesting term of the option using a graded vesting method.

SFAS 123 requires the disclosure of pro forma information regarding net loss and net loss per share determined as if Sangamo had accounted for its stock options and shares issued under its employee stock purchase plan under the fair value method. For purposes of this pro forma disclosure, the estimated fair value of the options is amortized to expense over the options' vesting period.

| | Year ended December 31, | | |
|---|---|---|---|
| | 2000 | 1999 | 1998 |
| Pro forma net loss attributable to common stockholders (in thousands) | $(11,123) | $(8,289) | $(3,296) |
| Pro forma basic and diluted net loss per share | $ (0.64) | $ (1.38) | $ (0.56) |

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 2000, 1999 and 1998 were estimated at the date of grant using the Black-Scholes method

**4. Stockholders' Equity (Continued)**

following the Company's initial public offering and using the minimum value method for periods prior to the initial public offering with the following weighted-average assumptions:

| | Year ended December 31, | | |
|---|---|---|---|
| | 2000 | 1999 | 1998 |
| Risk-free interest rate | 6.0% | 6.0% | 5.0% |
| Expected life of option | 5 yrs | 5 yrs | 5 yrs |
| Expected dividend yield of stock | 0% | 0% | 0% |
| Expected volatility | 0.8 | n/a | n/a |

In 2000, 1999 and 1998, respectively, Sangamo granted 375,000, 154,000 and 80,000 nonqualified common stock options to consultants at exercise prices that range from $0.15 to $8.00 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. Expense of $1.0 million and $15,000 was recognized in 2000 and 1999 related to these options. The related expense for 1998 was not material. The fair value of these options was determined using the Black-Scholes model with the following assumptions: risk free interest rate—6 percent; term—10 years; dividend yield—0 percent; and expected volatility of the company's common stock—.8.

**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 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.

**5. Loan to an Officer**

Sangamo advanced its President and Chief Executive Officer $250,000 under a Note Receivable Agreement (the "Note"). The Note bears interest at 6.02 percent per annum and is being forgiven one forty-eighth each month beginning January 1, 1998. As of December 31, 2000 and 1999, $62,500 and $125,000, respectively, of this Note was outstanding, which is included as a component of stockholders' equity in the accompanying balance sheets. The loan is secured by 500,000 shares of common stock owned by the officer.

On March 17, 2000 Sangamo entered into an agreement with an officer under which the Company loaned $400,000 to enable the officer to purchase up to 50,000 shares of common stock. The loan is full recourse, bears interest at 7.0 percent per annum, is payable in three years or when the stock is sold, whichever is earlier, and is secured by the stock being purchased. Under the agreement we also loaned the officer $250,000 as a housing allowance payable in four years from the date of the loan with interest at a rate of 7 percent. Twenty-five percent of the housing loan and associated interest will be

**5. Loan to an Officer (Continued)**

forgiven on each anniversary of the loan as long as the officer is a full-time employee of Sangamo at such time.

**6. Income Taxes**

There has been no provision for U.S. federal, U.S. state or foreign income taxes for any period because Sangamo has incurred operating losses in all periods and for all jurisdictions. 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 deferred tax assets are as follows:

| | December 31, | | |
|---|---|---|---|
| | 2000 | 1999 | 1998 |
| | (in thousands) | | |
| Deferred tax assets: | | | |
| Net operating loss carryforwards | $3,700 | $2,500 | $1,600 |
| Research and development credit carryforwards | 770 | 100 | — |
| Other reserves and accruals | 900 | 100 | — |
| | 5,370 | 2,700 | 1,600 |
| Valuation allowance | (5,370) | (2,700) | (1,600) |
| Net deferred tax assets | $ — | $ — | $ — |

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the net deferred tax assets have been fully offset by a valuation allowance. As of December 31, 2000, Sangamo had net operating loss carryforwards for federal and state income tax purposes of approximately $11,400,000. Sangamo also had federal and state research and development credit carryforwards of approximately $500,000 and $300,000. The net operating loss and credit carryforwards will expire at various dates beginning in 2010 through 2020, if not used. 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. However, management has not determined if the use of the net operating loss carryforwards will be limited.

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

None.

## PART III

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

The information required by this item with respect to our Annual Meeting of Stockholders will be contained in our definitive Proxy Statement, under the captions "Election of Directors—Nominees," and "Security Ownership of Certain Beneficial Owners and Management—Compliance with the Reporting Requirement of Section 16(a)," and is incorporated by reference.

The following table sets forth information regarding our executive officers, directors and key employees as of March 15, 2001:

| Name | Age | Position |
|---|---|---|
| Edward O. Lanphier II | 44 | President, Chief Executive Officer and Director |
| Alan P. Wolffe, Ph.D. | 41 | Senior Vice President and Chief Scientific Officer |
| Peter Bluford | 46 | Vice President, Corporate Development |
| Casey C. Case, Ph.D | 45 | Vice President, Research |
| Shawn K. Johnson | 33 | Senior Director, Finance |
| Eric T. Rhodes | 40 | Senior Director, Commercial Development |
| Julianna Wood | 45 | Senior Director, Corporate Communications |
| S. Kaye Spratt, Ph.D | 48 | Director, Delivery Technology |
| Herbert W. Boyer, Ph.D | 64 | Director |
| William G. Gerber, M.D | 54 | Director |
| Jon E. M. Jacoby | 62 | Director |
| John W. Larson | 65 | Director |
| William J. Rutter, Ph.D | 72 | Director |
| Michael C. Wood | 48 | Director |

*Edward O. Lanphier II,* the founder of Sangamo BioSciences, Inc., has served as President, Chief Executive Officer and as a member of the board of directors since the company's inception. Mr. Lanphier has approximately twenty years of experience in the pharmaceutical and biotechnology industry. From June 1992 to May 1997, he held various positions at Somatix Therapy Corporation, a gene therapy company, including Executive Vice President, Commercial Development and Chief Financial Officer. Prior to Somatix, Mr. Lanphier was President and Chief Executive Officer of BioGrowth, Inc., a biotechnology company that merged with Celtrix Laboratories to form Celtrix Pharmaceuticals, Inc. in 1991. From 1986 to 1987, Mr. Lanphier served as Vice President of Corporate Development at Biotherapeutics, Inc. From 1984 to 1986 he served as Vice President of Corporate Development at Synergen Inc. Prior to Synergen, he was employed by Eli Lilly and Company, a pharmaceutical company, in the strategic business planning-biotechnology group. Mr. Lanphier is a member of the Biotechnology Industry Organization (BIO) Emerging Companies Section and the BIO board of directors. Mr. Lanphier has a B.A. in biochemistry from Knox College.

*Alan P. Wolffe, Ph.D.* joined Sangamo as its Senior Vice President and Chief Scientific Officer in March 2000. Dr. Wolffe is internationally recognized for his research on chromatin structure and its role in the regulation of gene expression, with over 250 research publications on this topic. He was Director of the Department of Molecular Embryology at the National Institutes of Child Health and Human Development from 1990 until March 2000. During this time, Dr. Wolffe's laboratory discovered the determinants of chromosomal gene regulation by ZFPs, including observations that have proven fundamental to the understanding of histone acetylation and deacetylation in transcriptional control. Dr. Wolffe has received numerous prizes for his research and serves as an editor on the editorial boards of *Biochemistry, Journal of Cell Science, Molecular Biology of the Cell, Molecular Cell Biology,*

*Nucleic Acids Research,* and *Science*. Dr. Wolffe received a Ph.D. in molecular biology from the Medical Research Council and a B.A. in biochemistry from Oxford University.

*Peter Bluford* has served as Vice President, Corporate Development since December 1997 and since joining us has had operating responsibility for Sangamo's licensing, intellectual property and business planning activities. Mr. Bluford also served as Senior Director, Corporate Development, from October 1996 to November 1997. From October 1992 to September 1996, Mr. Bluford served as Director, Commercial Development at Somatix Therapy Corporation, where he was responsible for Somatix's strategic business planning activities while also serving as Project Team Leader, Oncology from 1995 to 1996. From 1991 to 1992, Mr. Bluford was with Celtrix Pharmaceuticals, Inc. as Manager, Strategic Market Planning. From 1990 to 1991, he was Manager of Strategic Planning with BioGrowth, Inc. Mr. Bluford received an M.B.A. and a B.S. in biochemistry from the University of California, Berkeley.

*Casey C. Case, Ph.D.* has served as Vice President, Research since November 1997. From June 1993 to November 1997, Dr. Case served as Director, Cell Biology at Tularik, Inc., a pharmaceutical company focusing on gene regulating drugs, where he was part of the team that established Tularik's cell-based, high throughput screening of small molecule modulators of specific transcription factors. From June 1989 to June 1993, Dr. Case was Director of Transcriptional Research at Oncogene Science, Inc., a pharmaceutical company, where he led Oncogene's research efforts in the development of mammalian cell-based assays for gene transcription and the automation of these assays for selection of therapeutic targets and compounds. Dr. Case earned a Ph.D. in biochemistry from the University of California, Davis and a B.S. in biology from San Diego State University.

*Shawn K. Johnson,* Senior Director, Finance, joined the company in December 1997 and has responsibility for the company's financial and administrative operations. From July 1995 to October 1997, Mr. Johnson was Director of Finance at Neurobiological Technologies, Inc., a pharmaceutical product development company. From July 1993 to June 1995, he managed various accounting functions for Glycomed Incorporated, a biotechnology research company. Prior to Glycomed, Mr. Johnson was the Controller for Cognitive Systems, Inc., a software technology company from 1989 to 1992. He holds an M.B.A. from the University of California, Berkeley and a B.S. in accounting from City University.

*Eric T. Rhodes,* Senior Director, Commercial Development, joined the company in July 1998 and has primary responsibility for management of our Universal GeneTools™ business. Prior to joining Sangamo, Mr. Rhodes served in a variety of capacities at Incyte Pharmaceuticals, Inc., a genomic database and data management software company, from March 1994 to July 1998. He initially served as part of the team responsible for expansion of Incyte's high throughput sequencing capabilities and later worked in the business development group where his primary focus was the evaluation and acquisition of new technologies. From 1991 to 1994, Mr. Rhodes directed the molecular biology group at Anergen, Inc., a biotechnology company focusing on treatment of autoimmune disease and prior to that he was with BioGrowth, Inc., from 1989 to 1991 and Triton BioSciences, a biotechnology company, as a molecular biologist from 1987 to 1989. Mr. Rhodes received a B.S. in microbiology and immunology from the University of California, Berkeley.

*Julianna Wood,* Senior Director, Corporate Communications, joined the company in March 2000 and is responsible for all external communications, including investor relations and public affairs. From November 1997 to March 2000, she was employed by Chiron Corporation, most recently as Senior Director of Corporate Communications and Investor Relations. Prior to Chiron, Ms. Wood served as a communications consultant to multiple companies from July 1995 until November 1997. Ms. Wood has also held similar communications positions with other biotechnology companies, including Glycomed Incorporated from March 1993 until July 1995, and Somatix Therapy Corporation from 1987 to 1993.

Ms. Wood earned her undergraduate degree from Stanford University and has a M.B.A. from Duke University.

*S. Kaye Spratt, Ph.D.* has served as Director of Delivery Technology since January 1998 and is currently directing Sangamo's cell biology and gene therapy efforts for the evaluation and delivery of engineered zinc finger proteins. From June 1997 to January 1998, Dr. Spratt was employed by Acacia Biosciences, a biotechnology research company, as Project Manager. From June 1992 to June 1997, Dr. Spratt was employed by Somatix Therapy Corporation as Section Manager and Senior Scientist responsible for the design, development and production of research and clinical grade gene therapy vectors. From 1987 to 1992, Dr. Spratt was Senior Scientist and Project Leader for BioGrowth Inc. Dr. Spratt received a Ph.D. in microbial genetics from Meharry Medical College and a B.S. in biology from Langston University.

*Herbert W. Boyer, Ph.D.* has served as a Director since July 1997. Dr. Boyer is the co-inventor of recombinant DNA technology with Dr. Stanley Cohen and founded Genentech, Inc., a biopharmaceutical company, in 1976. Dr. Boyer is currently Professor Emeritus at the University of California, San Francisco. Dr. Boyer has served as a director of Genentech since 1976 and was Vice President of Research from 1976 to 1990. Dr. Boyer was also a Professor of biochemistry and biophysics at the University of California, San Francisco from 1966 to 1991 where he retains the position of Professor Emeritus. He was also an Investigator for the Howard Hughes Medical Institute from 1976 to 1983. He has authored over 100 scientific publications and is a member of the National Academy of Sciences. Dr. Boyer has received numerous research awards including the National Medal of Science, the National Medal of Technology and the Albert Lasker Basic Medical Research Award. Dr. Boyer is Chairman of the Board of Directors of Allergan, Inc., a pharmaceutical company and a trustee of the Scripps Research Institute. Dr. Boyer received a Ph.D. in microbiology from the University of Pittsburgh and a B.A. in biology from St. Vincent College.

*William G. Gerber, M.D.* has served as a member of our board of directors since June 1997. Dr. Gerber is currently Chief Executive Officer and a Director of Epoch Biosciences, Inc., a biomedical company, where he has been since September 1999. From April 1998 to July 1999, he was President of diaDexus LLC, a pharmacogenomics company. Previous to his appointment at diaDexus, he was Chief Operating Officer of Onyx Pharmaceuticals. Before joining Onyx in 1995, Dr. Gerber was with Chiron Corporation, a biopharmaceutical, vaccine and blood testing company, where he was President of the Chiron Diagnostics business unit after Chiron's merger with Cetus Corporation in December 1991. He joined Cetus in 1987 as senior director of corporate ventures and was named Vice President and General Manager of the PCR (Polymerase Chain Reaction) Division in November 1988. Dr. Gerber earned his B.S. and M.D. degrees from the University of California, San Francisco School of Medicine.

*Jon E. M. Jacoby* has served as a member of our board of directors since April 2000. Mr. Jacoby is a director and an executive vice president of Stephens Group, Inc. He is also a senior executive vice president of Stephens Inc., an affiliate of Stephens Group, Inc., where he has been employed since 1963. Mr. Jacoby also serves on the board of directors of Delta and Pine Land Company, Beverly Enterprises, Inc., and Power-One, Inc., as well as on the boards of several privately held companies. He received his B.S. degree in geology from the University of Notre Dame and his M.B.A. from Harvard Business School.

*John W. Larson* has served as a member of our board of directors since January 1996. Mr. Larson has served as senior partner at the law firm of Brobeck, Phleger & Harrison LLP since March 1996. From 1988 until March 1996, Mr. Larson was Chief Executive Officer of the firm. He has been a partner with the firm since 1969, except for the period from July 1971 to September 1973 when he was in government service as Assistant Secretary of the United States Department of the Interior and Counselor to George P. Shultz, Chairman of the Cost of Living Council. Mr. Larson holds an L.L.B. and a B.A., with distinction, in Economics, from Stanford University.

*William J. Rutter, Ph.D.* has served as a member of our board of directors since January 2000. He is the co-founder of Chiron Corporation, a biopharmaceutical, vaccine and blood testing company, and served as Chairman of the Board of Directors from Chiron's inception in 1981 until May 1999. From August 1983 through April 1989, in addition to his responsibilities at Chiron, Dr. Rutter was the Director of the Hormone Research Institute at UCSF, and he became a Professor Emeritus in 1991. In 1969, Dr. Rutter joined the faculty of the University of California, San Francisco as a Herzstein Professor, and served as the chairman of the Department of Biochemistry and Biophysics at UCSF from 1969 to 1982. Dr. Rutter has also served on the Board of Overseers at Harvard University from 1992 to 2000, on the Board of Trustees at the Carnegie Institution of Washington since 1995 and several private company boards. Dr. Rutter is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. Dr. Rutter received his Ph.D. in biochemistry from the University of Illinois, an M.S. in biochemistry from the University of Utah and a B.A. in biochemistry from Harvard University.

*Michael C. Wood* has served as a member of our board of directors since our inception. Mr. Wood is currently President of LeapFrog Enterprises, Inc., an educational company which he founded in January 1995. Mr. Wood has 15 years of experience in the corporate legal representation of high technology firms and venture capital partnerships. From 1991 through 1994, he was a partner of the emerging technology companies group at Cooley Godward LLP. From 1979 to 1991, Mr. Wood practiced corporate law in the high technology practice of Crosby Heafy Roach & May. Mr. Wood received a J.D. from the Hastings College of Law, an M.B.A. from the University of California, Berkeley and his B.A. in political science from Stanford University.

**Scientific Advisory Board**

We use scientists and physicians to advise us on scientific matters as a part of our Scientific Advisory Board, including experts in molecular biology, structural biology, biophysics, biochemistry, cell biology, and gene expression. Generally, our scientific advisors have received options to purchase our common stock as compensation for their consulting services.

The following individuals are members of our Scientific Advisory Board:

*Carl Pabo, Ph.D. (Chairman)* is a professor of biophysics and structural biology at the Massachusetts Institute of Technology and an investigator in the Howard Hughes Medical Institute. Dr. Pabo is a pioneer in the structural analysis and modification of zinc finger DNA-binding proteins and has made many of the fundamental observations as to how ZFPs interact with their DNA-binding sites. Dr. Pabo received a Ph.D. in biochemistry and molecular biology from Harvard University and a B.S. in molecular biophysics and biochemistry from Yale College. He is a member of the National Academy of Sciences and of the American Academy of Arts and Sciences.

*Carlos F. Barbas III, Ph.D.* is an Associate Member of The Scripps Research Institute, where he has been since 1991. Dr. Barbas is an expert in the selection of ZFPs and has published several papers on the use of ZFP TFs to regulate gene expression. From 1989 to 1991, he was a postdoctoral fellow at The Scripps Research Institute and Pennsylvania State University. Dr. Barbas received his Ph.D. in chemistry from Texas A&M University and a B.S. in chemistry and physics from Eckerd College.

*Jeremy M. Berg, Ph.D.* is Professor and Director of the Department of Biophysics and Biophysical Chemistry at The Johns Hopkins University School of Medicine, where he has been since 1990. He is a leader in the field of ZFPs, and the Berg laboratory was one of the first to demonstrate the use of designed zinc finger arrays for the generation of novel, sequence-specific ZFPs. From 1986 to 1990, Dr. Berg was an associate professor in the Department of Chemistry at The Johns Hopkins University, and a postdoctoral fellow in the School of Medicine from 1984 to 1986. Dr. Berg received his Ph.D. in chemistry from Harvard University and a B.S. and M.S. degrees in chemistry from Stanford University.

*Judith Campisi, Ph.D.* is Head, Center for Research and Education in Aging Life Sciences Division of the Berkeley National Laboratory, where she has been conducting aging and cancer research since 1990. From 1984 to 1990, Dr. Campisi held professorships within the Department of Biochemistry at the Boston University School of Medicine. Dr. Campisi received her Ph.D. in biochemistry and a B.A. in chemistry from the State University of New York, Stony Brook.

*Srinivasan Chandrasegaran, Ph.D.* is an associate professor at The Johns Hopkins University School of Hygiene and Public Health, and a leading expert on the molecular biology, structure and function of type IIs restriction endonucleases. He has collaborated with Sangamo on the development of our DNA diagnostic program. Dr. Chandrasegaran received his Ph.D. in chemistry from Georgetown University, and B.S. and M.S. degrees in chemistry from Madras University.

*George N. ("Joe") Cox, Ph.D.* is President and Chief Scientific Officer of Bolder Biotech, a protein delivery biotechnology company. Dr. Cox was Vice President, Research and Development at Sangamo from March 1995 to June 1998. He spent the previous 12 years of his career at Synergen, Inc., in various positions including Group Leader, Discovery Research, Chairman of Synergen's science counsel, Director of Animal Health Care, and Senior Scientist. He received a Ph.D. in biology from the University of California, Santa Cruz and a B.S. in biology from Wesleyan University.

*Hamilton O. Smith, M.D.* is currently a Professor Emeritus of molecular biology and genetics at The Johns Hopkins University School of Medicine and Director of DNA Resources at Celera Genomics Corporation. Dr. Smith received the 1978 Nobel Prize in Medicine for his co-discovery of type IIs restriction enzymes. Dr. Smith has gone on to publish extensively on the genetic and genomic analysis of *haemophilus influenzae* and its natural transformation system. Dr. Smith is an American Cancer Society Research Professor and member of the National Academy of Sciences. He received his M.D. from The Johns Hopkins University School of Medicine, an A.B. in mathematics from the University of California, Berkeley, and a B.S. from the University of Illinois, Urbana.

*Kevin Struhl, Ph.D.* is the David Wesley Gaiser Professor of Biological Chemistry in the Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School. Dr. Struhl has established many of the principles involved in the molecular mechanisms of transcriptional activation and repression in eukaryotic cells including the recruitment of gene-specific and general transcription factors as well as histone deacetylases. Dr. Struhl received his Ph.D. in biochemistry from Stanford University, and S.M. and S.B. degrees from the Massachusetts Institute of Technology.

*Elton T. ("Ted") Young, Ph.D.* is a professor of biochemistry and genetics at the University of Washington in Seattle. Dr. Young has published numerous articles in the field of transcription factors and this remains a focus of his ongoing research at the University of Washington. Dr. Young has served as an editor for the *Journal of Molecular and Cellular Biology* since 1983. He received his Ph.D. in biophysics from the California Institute of Technology and has a B.A. in chemistry from the University of Colorado at Boulder.

**Items 11-13**

Pursuant to General Instruction G to Form 10-K, the information required by Items 11,12 and 13 of Part III is incorporated by reference to our definitive Proxy Statement with respect to our 2001 Annual Meeting of shareholders to be filed pursuant to Regulation 14A with the Securities and Exchange Commission no later than 120 days after December 31, 2000.

## PART IV

**Item 14. Exhibits, Financial Statement Schedules and Reports on Form 8-K**

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

1. Financial Statements—See Index to Consolidated Financial Statements in Item 8 of the report.
2. Financial Statement Schedules. None.
3. See Index to Exhibits.

(b) No reports on Form 8-K were filed during the last quarter of the fiscal year ended December 31, 2000.

(c) See the Index of Exhibits

(d) See the Financial Statements beginning on page 35 of this Form 10-K

## SIGNATURES

Under the requirements of the Securities Act of 1934, as amended, the registrant has duly caused this report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Francisco, State of California, on March 22, 2001.

SANGAMO BIOSCIENCES, INC.

By: /s/ SHAWN K. JOHNSON

Shawn K. Johnson
*Senior Director of Finance*

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints, jointly and severally, Edward O. Lanphier and Shawn K. Johnson, and each of them acting as individual, as his attorney-in-fact, each with full power of substitution and resubstitution, for him or her in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K (including post-effective amendments), and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Under the requirements of the Securities Act of 1934, as amended, this Form 10-K has been signed by the following persons in the capacities and on the dates indicated:

| Signature | Title | Date |
|---|---|---|
| /s/ EDWARD O. LANPHIER II<br>Edward O. Lanphier II | President, Chief Executive Officer and Director (Principal Executive Officer) | March 22, 2001 |
| /s/ SHAWN K. JOHNSON<br>Shawn K. Johnson | Senior Director of Finance (Principal Accounting Officer) | March 22, 2001 |
| /s/ HERBERT W. BOYER, PH.D.<br>Herbert W. Boyer, Ph.D. | Director | March 22, 2001 |
| /s/ WILLIAM G. GERBER, M.D.<br>William G. Gerber, M.D. | Director | March 22, 2001 |
| /s/ JON E. M. JACOBY<br>Jon E. M. Jacoby | Director | March 22, 2001 |
| /s/ JOHN W. LARSON<br>John W. Larson | Director | March 22, 2001 |
| /s/ WILLIAM J. RUTTER, PH.D.<br>William J. Rutter, Ph.D. | Director | March 22, 2001 |
| /s/ MICHAEL C. WOOD<br>Michael C. Wood | Director | March 22, 2001 |

## Index to Exhibits

| Exhibit Number | Description of Document |
|---|---|
| 1.1‡ | Form of Underwriting Agreement. |
| 3.1‡ | Amended and Restated Certificate of Incorporation. |
| 3.2‡ | Amended and Restated Bylaws. |
| 4.1‡ | Form of Specimen Common Stock Certificate. |
| 4.2‡ | Second Amended and Restated Investors' Rights Agreement, among Sangamo and certain of its stockholders, dated March, 2000. |
| 10.1‡ | 2000 Stock Incentive Plan. |
| 10.2‡ | 2000 Employee Stock Purchase Plan. |
| 10.3 | [Intentionally left blank] |
| 10.4‡ | Form of Indemnification Agreement entered into between Sangamo and each of its directors and executive officers. |
| 10.5‡ | Triple Net Laboratory Lease, between Sangamo and Point Richmond R&D Associates II, LLC, dated May 23, 1997. |
| 10.6‡ | Form of collaboration agreement. |
| 10.7†‡ | License Agreement, between Sangamo and Baxter Healthcare Corporation, dated January 11, 2000. |
| 10.8†‡ | Sublicense Agreement, by and between Sangamo and Johnson & Johnson, dated May 9, 1996. |
| 10.9†‡ | ZFP Material Transfer Agreement, between Sangamo and Japan Tobacco Inc., dated March 8, 1999. |
| 10.10‡ | Financial Assistance Award from U.S. Department of Commerce, dated March 31, 1997. |
| 10.11‡ | Notice of Grant Award from National Institute of Allergy and Infectious Diseases, dated August 9, 1999. |
| 10.12†‡ | Patent License Agreement between Sangamo and Massachusetts Institute of Technology dated May 9, 1996. |
| 10.13†‡ | License Agreement between Sangamo and the Johns Hopkins University dated July 16, 1998. |
| 10.14†‡ | License Agreement between Sangamo and the Medical Research Council dated September 1, 1996. |
| 10.15‡ | Employment Agreement, between Sangamo and Edward O. Lanphier II, dated June 1, 1997. |
| 10.16‡ | 1995 Stock Option Plan. |
| 10.17‡ | Research Funding Agreement, by and between Sangamo and Baxter Healthcare Corporation, dated January 11, 2000. |
| 10.18‡ | Employment Agreement, between Sangamo and Alan Wolffe, Ph.D., dated March 17, 2000. |
| 10.19‡ | License Agreement by and between The Scripps Research Institute and Sangamo, dated March 14, 2000. |
| 23.1(1) | Consent of Ernst & Young LLP, Independent Auditors. |
| 24.1 | Power of Attorney. (See page 57) |

† Confidential treatment has been granted as to portions of this exhibit.

‡ Incorporated by reference from Sangamo's Registration Statement on From S-1 (Reg. No. 333-30314), as amended.

(1) filed herewith

**Exhibit 23.1**

**CONSENT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS**

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2000 Stock Incentive Plan and the 2000 Employee Stock Purchase Plan, of our report dated January 26, 2001, with respect to the financial statements of Sangamo BioSciences, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2000.

/s/ ERNST & YOUNG LLP

Palo Alto, California
March 21, 2001

# Directory

## Management

**Edward Lanphier**
President and Chief Executive Officer

**Peter Bluford**
Vice President, Corporate Development

**Casey Case, Ph.D.**
Vice President, Research

**Shawn Johnson**
Senior Director, Finance

**Eric Rhodes**
Senior Director,
Commercial Development

**Kaye Spratt, Ph.D.**
Director, Delivery Technology

**Alan Wolffe, Ph.D.**
Senior Vice President and
Chief Scientific Officer

**Julianna Wood**
Senior Director,
Corporate Communications

## Board of Directors

**Herbert Boyer, Ph.D.**
Professor Emeritus,
University of California, San Francisco
Co-founder, Genentech, Inc.

**William Gerber, M.D.**
Chief Executive Officer
Epoch Biosciences, Inc.

**Jon Jacoby**
Senior Executive Vice President
Stephens Inc.

**Edward Lanphier**
President and Chief Executive Officer
Sangamo BioSciences, Inc.

**John Larson**
Senior Partner
Brobeck, Phleger & Harrison LLP

**William Rutter, Ph.D.**
Professor Emeritus,
University of California, San Francisco
Co-founder, Chiron Corporation

**Michael Wood**
Founder and President,
LeapFrog Enterprises, Inc.

## Legal Counsel

Brobeck, Phleger & Harrison LLP
San Francisco, CA

## Independent Auditors

Ernst & Young LLP

## Transfer Agent

EquiServe, L.P.
150 Royall Street
Canton, MA 02021
(781) 575-3400
www.equiserve.com

## Common Stock Information

Symbol: SGMO
Exchange: Nasdaq

## Annual Meeting

The Annual Meeting of Stockholders will be held at 10:00 a.m., May 18, 2001 at Sangamo BioSciences, Inc.; 501 Canal Blvd, Suite A100; Richmond, CA 94804.

## Additional Information

For more information, please visit our web site at www.sangamo.com or write to:

Sangamo BioSciences, Inc.
Investor Relations
501 Canal Blvd, Suite A100
Richmond, CA 94804
(510) 970-6000



Design: Casper Design Group, Berkeley www.casperdesign.com

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