AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON APRIL 5, 2000

REGISTRATION NO. 333-30134

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

AMENDMENT NO. 5

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FORM S-1 REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

SANGAMO BIOSCIENCES, INC. (EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE (STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)

8731 (PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE NUMBER)

68-0359556 (I.R.S. EMPLOYER IDENTIFICATION 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)

EDWARD O. LANPHIER II PRESIDENT AND CHIEF EXECUTIVE OFFICER PRESIDENT AND CHIEF EXECUTIVE OFFICER
SANGAMO BIOSCIENCES, INC.

501 CANAL BOULEVARD, SUITE A100
RICHMOND, CA 94804
(510) 970-6000

(NAME AND ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA
CODE, OF AGENT FOR SERVICE)

COPIES TO:

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APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable after the effective date of this Registration Statement.

If the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. [ ]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. [ ]

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT THAT SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933, AS AMENDED, OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES, AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES, IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED APRIL 5, 2000

**PROSPECTUS** 

5,000,000 Shares

[SANGAMO LOGO]

SANGAMO BIOSCIENCES, INC.

Common Stock

This is our initial public offering of shares of common stock. We are offering 5,000,000 shares. No public market currently exists for our shares. We currently anticipate the price range for the common stock to be between \$15.00 and \$17.00 per share.

Our common stock has been approved for quotation on the Nasdaq National Market under the symbol "SGMO."  $\,$ 

INVESTING IN THE SHARES INVOLVES RISK. "RISK FACTORS" BEGIN ON PAGE 6.

	PER SHARE	TOTAL
Public Offering Price	\$	\$ \$ \$

We have granted the underwriters a 30-day option to purchase up to 750,000 additional shares of common stock to cover any over-allotments.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS ACCURATE OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

Lehman Brothers expects to deliver the shares on or about April , 2000.

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LEHMAN BROTHERS

CHASE H&Q

ING BARINGS

WILLIAM BLAIR & COMPANY

, 2000

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Until , 2000, 25 days after the date of this prospectus, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligations to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

#### PROSPECTUS SUMMARY

This summary highlights some of the information found in greater detail elsewhere in this prospectus. Unless otherwise indicated, information in this prospectus assumes that the underwriters do not exercise their over-allotment option, assumes the conversion of all of our preferred stock into common stock upon effectiveness of this offering and a 2-for-1 stock split which will be effected before completion of the offering.

Sangamo BioSciences, Inc. is a leader in the research and development of novel transcription factors for the regulation of genes. Genes are composed of DNA and control the expression and transmission of all inherited traits. Transcription factors are proteins that turn genes on and turn genes off, or regulate gene expression, by recognizing specific DNA sequences.

Our Universal Gene Recognition technology enables the engineering of a class of transcription factors known as zinc finger DNA binding proteins, or ZFPs. ZFPs are the most abundant class of transcription factors in humans and other higher organisms and naturally function to regulate gene expression. By engineering ZFPs so that they can recognize a specific gene, we have created ZFP transcription factors that can control gene expression and, consequently, cell function. We intend to establish Universal Gene Recognition as a widely used technology for commercial applications in pharmaceutical discovery, therapeutics for the treatment of human diseases, clinical diagnostics, and agricultural and industrial biotechnology.

The identification of all human genes, referred to as the sequencing of the human genome, involves the dedication of enormous scientific and financial resources. The accelerating pace of genetic discovery creates significant opportunities for pharmaceutical and other life science companies. The challenge facing these companies is how to derive medically and commercially valuable knowledge from this large accumulation of new genetic information.

We believe our Universal Gene Recognition technology has the potential to address these challenges and has broad applicability to the sectors below, each of which represents a significant target market with unmet needs:

- Universal GeneTools for Pharmaceutical Discovery are ZFP transcription factors for the identification and evaluation of medically important genes in humans, animals and other organisms, and for improved efficiency in the screening of chemical compounds for pharmaceutical discovery;
- ZFP-Therapeutics are ZFP transcription factors developed as pharmaceutical products to treat a broad spectrum of diseases through the regulation of disease-related genes;
- ZFP-Diagnostics are developed to detect specific DNA sequences in clinical samples of DNA, to determine an individual's potential susceptibility to disease or probable response to drug therapy; and
- ZFP Transcription Factors for Agricultural and Industrial Biotechnology are designed for use in the study of newly discovered plant genes, agrochemical discovery, the engineering of plants with improved properties and the biological production of industrial chemicals.

We believe our engineered ZFP transcription factors have numerous advantages for the regulation of gene expression including:

- ZFP transcription factors normally and naturally regulate gene expression in the cells of virtually all higher organisms;
- ZFPs can be designed to recognize unique DNA sequences resulting in the ability to recognize a single gene within an organism's entire genome;

- ZFP transcription factors can turn on or turn off a target gene, enhancing their versatility;
- ZFP transcription factors can be used to regulate gene expression in many different organisms including humans, animals, plants, fungi, bacteria and viruses; and
- ZFP transcription factors can turn genes on and turn genes off in a reversible fashion, allowing regulation of gene expression for a defined period of time.

To date, we have engineered hundreds of ZFP transcription factors and have performed experiments to test their ability to recognize their target sequences and to function in cells. We have also demonstrated the ability of ZFP transcription factors to regulate a limited number of commercially important genes.

We intend to develop our Universal Gene Recognition technology for applications in pharmaceutical discovery, therapeutics for the treatment of human diseases, clinical diagnostics, and agricultural and industrial biotechnology. To establish Universal Gene Recognition as a widely used technology in life sciences industries, and to fund internal research and development activities, we have established and will continue to pursue collaborations with selected pharmaceutical and biotechnology companies. We have signed Universal GeneTools agreements, which we refer to as collaborations, with 18 pharmaceutical or biotechnology companies including the following companies or their subsidiaries:

- Pfizer Inc.,
- SmithKline Beecham plc,
- Millennium Pharmaceuticals, Inc.,
- AstraZeneca PLC,
- Schering AG,
- Bayer Corporation,
- Glaxo Wellcome plc,
- DuPont Pharmaceuticals Company,
- Japan Tobacco Inc.,

- F. Hoffmann-La Roche Ltd.,
- Immunex Corporation,
- Pharmacia & Upjohn Company,
- Genset SA,
- Warner-Lambert Company,
- Merck KGaA,
- Zaiya Incorporated and
- Procter & Gamble Pharmaceuticals.

We have also entered into a strategic partnership with Edwards LifeScience, Inc., formerly the CardioVascular Group of Baxter Healthcare Corporation, for the development and commercialization of ZFP-Therapeutics in cardioVascular and peripheral vascular diseases. Under this agreement, Baxter has purchased a \$5 million convertible note which will convert into common stock upon consummation of this offering, and we have received \$1 million in initial research funding from Baxter. Baxter has exercised an option by purchasing an additional \$7.5 million convertible note which will convert into common stock upon consummation of this offering for a right of first refusal to negotiate a license for additional ZFP-Therapeutics in cardiovascular and peripheral vascular diseases. We expect to enter into other strategic partnerships to accelerate the development of ZFP transcription factors as potential pharmaceutical candidates.

Sangamo was founded and incorporated in Delaware in 1995. Our principal offices are located at 501 Canal Boulevard, Suite A100, Richmond, CA 94804, and our telephone number is (510) 970-6000.

#### THE OFFERING

Common stock offered by Sangamo..... 5,000,000 shares

Common stock to be outstanding after

Use of proceeds...... For research and development, capital

equipment and general corporate purposes. See "Use of Proceeds" for more information regarding our planned use of the proceeds from this offering.

Nasdaq National Market symbol..... SGMO

The number of shares of common stock to be outstanding after this offering is based on the number of shares outstanding as of December 31, 1999 adjusted to reflect the issuance of 333,333 shares of preferred stock in January 2000 which converts into 666,666 shares of common stock upon consummation of this offering and, together with accrued interest, the issuance of a \$5 million note in January 2000 and a \$7.5 million note in March 2000 which convert into common stock at the initial public offering price upon the consummation of the offering, and excludes:

- a total of 1,872,666 shares issuable upon the exercise of outstanding options at a weighted average exercise price of \$0.15 per share;
- a total of 259,962 shares issuable upon the exercise of outstanding warrants at a weighted average exercise price of \$1.00 per share; and
- a total of 2,400,000 shares available for future issuance under our stock plans.

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#### SUMMARY FINANCIAL DATA

The following table sets forth summary financial data for our company. You should read this information together with the financial statements and the notes to those statements appearing elsewhere in this prospectus and the information under "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Please see the financial statements and the notes to the statements appearing elsewhere in this prospectus for the determination of the number of shares used in computing the basic and diluted and pro forma basic and diluted net loss per share.

	YEAR ENDED DECEMBER 31,		
		1998	
	(IN THOUSANDS, EXCEPT PER SHARE DATA)		
STATEMENT OF OPERATIONS DATA:			
Total revenues Operating expenses:	\$ 1,152	\$ 2,038	\$ 2,182
Research and development	797	4,259 1,237	4,266 1,822
Total operating expenses	2,497	5,496	6,088
Loss from operations	(1,345)		
Net loss  Deemed dividend upon issuance of convertible preferred		(3,285)	
stock			(4,500)
Net loss attributable to common stockholders		\$(3,285)	\$(8,275)
Basic and diluted net loss per common share	\$ (0.26) ======		,
Shares used in computing basic and diluted net loss per common share	5,485 =====	•	5,991 =====
Pro forma basic and diluted net loss per common share (unaudited)			\$ (0.63) ======
Shares used in computing pro forma basic and diluted net loss per common share (unaudited)			13,102 ======

The following table is a summary of our balance sheet as of December 31, 1999. The pro forma column reflects the issuance in January 2000 of 333,333 shares of preferred stock for \$1.5 million which converts into 666,666 shares of common stock upon consummation of this offering and a \$5 million note in January 2000 and a \$7.5 million note in March 2000 which convert, together with accrued interest, into common stock at the initial public offering price upon consummation of this offering. The pro forma as adjusted column also reflects our receipt of the estimated net proceeds from the sale of the shares of common stock offered in this offering at an assumed initial public offering price of \$16.00 per share after deducting the estimated underwriting discount and offering expenses payable by us. See "Use of Proceeds" and "Capitalization" and Notes 1, 4, and 7 of Notes to Financial Statements.

# AS OF DECEMBER 31, 1999

	ACTUAL	PRO FORMA	PRO FORMA AS ADJUSTED
		(IN THOUSAND	S)
BALANCE SHEET DATA:			
Cash, cash equivalents, and short-term investments	\$ 7,503	\$21,503	\$94,703
Working capital	7,206	21,206	94,406
Total assets	9,162	23,162	96,362
Long-term debt	250	250	250
Accumulated deficit	(8,785)	(8,918)	(8,918)
Total stockholders' equity	7,882	21,882	95,082

#### 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 prospectus. 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 transcription factors for some gene sequences, we have not created ZFP transcription factors for all gene sequences and we may not be able to create ZFP transcription factors for all gene sequences which would limit the usefulness of our technology. In addition, while we have demonstrated the function of engineered ZFP transcription factors in cell cultures, we have not done so in animals and 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 Gene Tools 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 transcription factors 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 transcription factors 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 transcription factors, 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 TRANSCRIPTION FACTORS DELIVERED TO OUR UNIVERSAL GENETOOLS COLLABORATORS HAVE PRODUCED MIXED RESULTS.

Some of our Universal GeneTools collaborators have been able to confirm the potential utility of our gene regulation technology. Two of our collaborators, Immunex Corporation and Millennium Pharmaceuticals, Inc., however, have not yet been able to regulate gene expression using our technology. We have taken steps to ascertain the reasons for these initial observations. We continue to work with these collaborators to address and remedy any issues that may be associated with the ZFP transcription factors, including redesign of the ZFP transcription factors. These collaborators continue to evaluate our technology. Further, most of our collaborators have not yet started testing or have not yet generated the final results of their testing. The ZFP transcription factors that we have generated for our other collaborators or our strategic partner may not function as intended and the ZFP transcription factors engineered in the future for other collaborators or strategic partners may not function as intended. If we are unsuccessful in engineering ZFP transcription factors 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 OPPOPULINITY

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 transcription factors 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 map and sequence DNA, 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 45 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

At present the scope of our needs is somewhat limited to the expertise of personnel who are able to engineer ZFP transcription factors 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 limited to federal government research grants and Universal GeneTools collaborators and a strategic partner. Our Universal GeneTools collaborators are evaluating our initial ZFP transcription factors. If the initial ZFP transcription factors 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;
- 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 design and testing procedures take place on a relatively small scale. In the future, we intend to apply ZFP 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 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, 1999, we had an accumulated deficit of approximately \$8.8 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 FINANCING BEYOND THE PROCEEDS OF THIS OFFERING. 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 and the proceeds of this offering 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.

OUR TECHNOLOGY INFRASTRUCTURE IS NOT YET COMPLETE AND ANY DELAY OR FAILURE TO COMPLETE IT COULD PREVENT US FROM EFFICIENTLY DELIVERING ZFP TRANSCRIPTION FACTORS TO OUR UNIVERSAL GENETOOLS COLLABORATORS OR STRATEGIC PARTNERS.

Part of our strategy involves building additional technology infrastructure to support our Universal Gene Recognition technology. This strategy includes the continued research and

development of improved and automated processes for design and production of our ZFP transcription factors. In addition, we intend to continue to assemble large collections, or libraries, of ZFPs for use in pharmaceutical target discovery. Because this infrastructure is an important part of our platform, any delay or failure to complete it could slow our growth and our ability to advance our strategic initiatives.

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 transcription factor 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 transcription factors 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. We currently have only one strategic partner. 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 transcription factors which target specific genes, our current 18 collaborators and strategic partner 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 transcription factors 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 transcription factors 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 the alternative technology 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 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. We currently hold an exclusive sublicense for ZFP transcription factor technology which is limited to using the technology in human and animal healthcare. The scope of this license may be subject to dispute. We may need to license additional rights to commercialize our technology outside human and animal healthcare. We will seek to obtain a sublicense to these patent applications for use in our agricultural biotechnology efforts. If we are not able, however, to license these additional rights, it could harm our business. Similarly, 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 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. 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. It is possible, however, that these parties will bring future actions against us, our Universal GeneTools collaborators or our 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, the risks of a negative impact on our business can neither be clearly defined nor entirely eliminated.

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 Food and Drug Administration, or FDA, must approve any therapeutic and some diagnostic products based on ZFP 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 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.

#### RISKS RELATED TO THIS OFFERING

OUR STOCK PRICE MAY BE VOLATILE, WHICH COULD RESULT IN SUBSTANTIAL LOSSES FOR INVESTORS PURCHASING SHARES IN THIS OFFERING.

Volatility in the biotechnology market could cause you to incur substantial losses. Prior to this offering, you could not buy or sell our common stock publicly. An active public market for our common stock may not develop or be sustained after this offering. We will negotiate and determine the initial public offering price with the representatives of the underwriters based on several factors. In addition, the market price of our common stock may be 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, since many biotechnology companies have recently registered their securities to trade publicly and may create a more volatile trading sector;
- 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.

OUR STOCK PRICE COULD BE ADVERSELY AFFECTED BY ADDITIONAL SHARES BECOMING AVAILABLE FOR SALE.

Sales of a substantial number of shares of our common stock, or the perception that these sales could occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. In addition, we have entered into registration rights agreements with some investors that entitle these investors to have their shares registered for sale in the public market. The exercise of these rights could affect the market price of our common stock. See "Shares Eligible for Future Sale" for further information concerning potential sales of our shares after this offering.

PURCHASERS IN THIS OFFERING WILL INCUR IMMEDIATE AND SUBSTANTIAL DILUTION.

We expect that the initial public offering price of our common stock will be substantially higher than the book value per share of the outstanding common stock. As a result, you will incur immediate and substantial dilution of \$11.73 per share in the net tangible book value per share of common stock from the initial public offering price. In the past, we issued options and warrants to acquire common stock at prices significantly below the initial public offering price. The exercise of options and warrants currently outstanding could cause additional, substantial dilution to you. See "Dilution" for more detailed information regarding the potential dilution you may incur.

INSIDERS WILL CONTINUE TO HAVE SUBSTANTIAL CONTROL OVER SANGAMO AFTER THIS OFFERING AND COULD DELAY OR PREVENT A CHANGE IN CORPORATE CONTROL.

The interest of management could conflict with the interest of our other stockholders. Upon completion of this offering, our executive officers, directors and principal stockholders will beneficially

own, in the aggregate, approximately 31.3% 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.

## 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, 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," "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."

## ABOUT THIS PROSPECTUS

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information that is different from that contained in this prospectus. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock.

This preliminary prospectus is subject to completion prior to this offering. Among other things, this preliminary prospectus describes our company as we currently expect it to exist at the time of this offering.

Universal Gene Recognition(TM), Universal GeneTools(TM), ZFP-Diagnostics(TM), ZFP-Therapeutics(TM), ZFP-Transgenics(TM) and ZFP(TM) are our trademarks. We will apply to register Universal Gene Recognition, Universal GeneTools, ZFP-Diagnostics, ZFP-Therapeutics, ZFP-Transgenics and ZFP. All trademarks and trade names appearing elsewhere in this prospectus are the property of their respective holders.

#### USE OF PROCEEDS

Our net proceeds from the sale of the 5,000,000 shares of common stock we are offering will be approximately \$73.2 million, or \$84.4 million if the underwriters' over-allotment option is exercised in full, based on an assumed initial offering price of \$16.00 per share, after deducting the estimated underwriting discount and commissions and the estimated offering expenses.

We currently expect to use the net proceeds of this offering for research and development, capital equipment and general corporate purposes. We may also use a portion of the net proceeds to acquire or invest in businesses, products and technologies that are complementary to our own, although no acquisitions are planned or being negotiated as of the date of this prospectus, and no portion of the net proceeds has been allocated for any specific acquisition or for acquisitions generally. Pending these uses, the net proceeds will be invested in short term, investment grade, interest-bearing securities.

The principal purposes of the offering are to increase our capitalization and financial flexibility, to provide a public market for our common stock and to facilitate access to public equity markets. While it is not possible to estimate with certainty how the net proceeds of this offering will be used over the next three years, we believe that approximately \$60 million will be used for research and development, approximately \$10 million for capital equipment and the balance for general corporate purposes. Since these are only estimates, our management will have broad discretion in the application of net proceeds.

### DIVIDEND POLICY

We have never paid dividends on our common or preferred stock. We currently intend to retain any future earnings to support the development of our business. Therefore, we do not currently anticipate paying any cash dividends in the foreseeable future.

#### CAPTTAL TZATTON

The following table sets forth our capitalization as of December 31. 1999:

- on an actual basis
- on a pro forma basis to give effect to:
- automatic conversion of all outstanding shares of preferred stock into 9,711,834 shares of common stock upon consummation of the offering;
- the issuance of 333,333 shares of preferred stock in January 2000 which converts into 666,666 shares of common stock upon consummation of the offering;
- the issuance of a \$5 million note in January 2000 and a \$7.5 million note in March 2000 which convert, together with accrued interest, into 789,587 shares of common stock at an assumed initial public offering price upon consummation of the offering of \$16.00.
- on a pro forma as adjusted basis to give effect to the sale of 5,000,000 shares of our common stock at an assumed initial public offering price of \$16.00 per share in this offering, after deducting the estimated underwriting discounts and commissions and our estimated offering expenses.

You should read this table with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Financial Statements and Notes to the Financial Statements appearing elsewhere in this prospectus.

	AS OF DECEMBER 31, 1999			
	ACTUAL PRO FORMA			
		(IN THOUSAND		
Long-term debt, less current portion	\$ 250	\$ 250	\$ 250	
Stockholders' equity:  Preferred stock, \$0.01 par value, 6,000,000 shares authorized, actual and pro forma, 5,000,000 shares authorized, pro forma as adjusted; 4,855,917 shares issued and outstanding, actual, no shares issued and outstanding, pro forma and pro forma as adjusted  Common stock, \$0.01 par value, 15,000,000 authorized, actual, 80,000,000 shares authorized, pro forma and pro forma as adjusted; 6,132,060 shares issued and outstanding, actual, 17,300,147 shares issued and outstanding, pro forma and 22,300,147 shares issued and	15,187			
outstanding, pro forma as adjusted  Note receivable from stockholder  Deferred stock compensation	(125) (1,736)	32,578 (125) (1,736) (8,918) 83	(125) (1,736)	
Total stockholders' equity	7,882			
Total capitalization			\$ 95,332	

The number of shares of common stock outstanding excludes:

- 1,872,666 shares of common stock issuable upon exercise of stock options outstanding at a weighted average exercise price of \$0.15 per share;
- 259,962 shares of common stock issuable upon the exercise of outstanding warrants at a weighted average exercise price of \$1.00 per share; and
- a total of 2,400,000 shares of common stock available for future issuance under our stock option plans.

#### DTIUTTON

Our pro forma net tangible book value at December 31, 1999 was \$7.9 million, or \$0.50 per share, assuming the conversion of our preferred stock into common stock upon consummation of the offering. Pro forma net tangible book value per share represents total net tangible assets less liabilities, divided by pro forma common shares outstanding after giving effect to the conversion of our preferred stock into common stock upon the consummation of this offering. Subsequent to December 31, 1999, we issued 333,333 shares of preferred stock for \$1.5 million which converts into 666,666 shares of common stock upon consummation of this offering, and a \$5 million note in January 2000 and a \$7.5 million note in March 2000 which convert, together with accrued interest, into 789,587 shares of common stock at an assumed initial offering price of \$16.00, upon consummation of this offering. These subsequent issuances increased our pro forma net tangible book value per share by \$0.76, assuming their conversion into common stock.

After giving effect to our sale of shares of common stock in this offering and after deducting the underwriting discounts and commissions and our estimated offering expenses, our pro forma net tangible book value as of December 31, 1999 would have been \$95.1 million, or \$4.26 per share. This represents an immediate increase in pro forma net tangible book value of \$3.00 per share to existing stockholders and an immediate dilution of \$11.74 per share to new investors. Dilution in pro forma net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of our common stock in this offering and the pro forma net tangible book value per share of our common stock immediately following this offering. The following table illustrates this per share dilution:

Initial public offering price per share  Pro forma net tangible book value per share at December		\$16.00
31, 1999  Increase per share attributable to equity and convertible	\$ 0.50	
note issuances subsequent to December 31, 1999	0.76	
Increase per share attributable to the offering	3.00	
Pro forma net tangible book value per share after the		
offering		4.26
Dilution per share to new investors		\$11.74
		=====

The following table summarizes, using the same pro forma assumptions as above and assuming an initial public offering price of \$16.00, the differences between the existing stockholders and new investors with respect to the number of shares of common stock purchased from us, the total consideration paid to us, and the average price per share.

	SHARES PURCHASED TOTAL CO			ERATION		
	NUMBER	PERCENT	AMOUNT			AGE PRICE R SHARE
Existing stockholders		78%	\$ 29,478,000	27%	\$	1.70
New investors	5,000,000	22	80,000,000	73		16.00
Totals	22 300 147	100%	\$109,478,000	100%		
	========	===	========	===		

This table excludes the following shares as of December 31, 1999:

\_ \_\_\_\_\_\_

- 1,872,666 shares issuable upon exercise of outstanding options at a weighted average exercise price of \$0.15 per share;
- 259,962 shares issuable upon exercise of outstanding warrants at a weighted average exercise price of \$1.00 per share; and
- a total of 2,400,000 shares available for future issuance under our stock plans.

See "Management -- Stock Plans" and Note 4 of Notes to Financial Statements.

#### SELECTED FINANCIAL DATA

Our audited financial statements, which have been audited by Ernst & Young LLP, were used for the following selected statement of operations data for the period from inception to December 31, 1995 and for the years ended December 31, 1996, 1997, 1998 and 1999, and the balance sheet data as of December 31, 1995, 1996, 1997, 1998 and 1999. The diluted net loss per share computation excludes potential shares of common stock (preferred stock, options and warrants to purchase common stock and common stock subject to repurchase rights that we hold), since their effect would be antidilutive. See Note 1 of Notes to Financial Statements for a detailed explanation of the determination of the shares used to compute actual and pro forma basic and diluted net loss per share. Our historical results are not necessarily indicative of results to be expected for future periods. You should read the following selected financial data along with our Financial Statements and related Notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

	YEAR ENDED DECEMBER 31,				
	1995	1996	1997	1998	1999
	(IN	THOUSANDS	S, EXCEPT	PER SHARE [	DATA)
STATEMENT OF OPERATIONS DATA: Total revenues	\$ 183	\$ 632	\$ 1,152	\$ 2,038	\$ 2,182
Operating expenses: Research and development General and administrative	150 50	628 322	1,700 797	4,259 1,237	4,266 1,822
Total operating expenses	200	950	2,497	5,496	6,088
Loss from operations Interest income (expense), net	(17)	(318) 10	(1,345) (55)	(3,458) 173	(3,906) 131
Net loss  Deemed dividend upon issuance of convertible	(17)	(308)	(1,400)	(3,285)	(3,775)
preferred stock					(4,500)
Net loss attributable to common stockholders	\$ (17) =====	\$ (308) =====	\$(1,400) =====	\$(3,285) ======	\$(8,275) =====
Basic and diluted net loss per common share	\$(0.00) =====	\$(0.06) =====	\$ (0.26) ======		
Shares used in computing basic and diluted net loss per common share	5,000 =====	5,143 =====	5,485 ======	5,843 ======	5,991 =====
Pro forma basic and diluted net loss per common share (unaudited)					\$ (0.63) ======
Shares used in computing pro forma basic and diluted net loss per common share					
(unaudited)					13,102 ======
	AS OF DECEMBER 31,				
	1995	1996	1997	1998	1999
	(IN THOUSANDS)				
BALANCE SHEET DATA: Cash, cash equivalents and short-term	<b>#0.45</b>	<b>4</b> 050	<b>.</b>	<b>4</b> 0 050	<b>4</b> 7 500
investments	. 308 . 346	\$ 358 434 539	\$ 6,314 6,233 6,896	\$ 3,058 3,161 4,032	\$ 7,503 7,206 9,162
Long-term debt		(325)	(1,725)	250 (5,010)	250 (8,785)

434

6,409

3,404

7,882

Total stockholders' equity.....

## 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 prospectus.

#### OVERVIEW

We were incorporated in June 1995. From our inception through December 31, 1999, our activities related primarily to establishing a research and development organization and developing relationships with our Universal GeneTools collaborators. We have incurred net losses since inception and expect to incur losses in the near future as we expand our research and development activities. To date, we have funded our operations primarily through the issuance of equity securities, borrowings, and payments from federal government research grants and from Universal GeneTools collaborators. As of December 31, 1999, we had an accumulated deficit of \$8.8 million.

Our revenues consist primarily of federal government research grant funding and revenues from our Universal GeneTools collaborators. We expect that in the near future, our revenues will also include payments from strategic partners for technology access fees, committed research funding and research milestone payments.

In January 2000, we announced that we had entered into a strategic partner agreement with Edwards LifeScience, Inc., formerly the CardioVascular Group of Baxter Healthcare Corporation for the development of ZFPs in cardiovascular and peripheral vascular diseases. Under this agreement, Baxter has purchased a \$5 million convertible note which will convert, together with accrued interest, into common stock upon consummation of this offering, and we have received \$1 million in initial research funding from Baxter. In March 2000, Baxter exercised an option by purchasing a \$7.5 million convertible note, which will convert, together with accrued interest, into common stock upon consummation of this offering, for a right of first refusal to negotiate a license for additional ZFP-Therapeutics in cardiovascular and peripheral vascular disease. In the future, we may receive option fees, milestone payments, royalties and additional research funding from this agreement. See "Business -- Corporate Collaborations" and Note 7 of Notes to Financial Statements.

Research and development expenses consist primarily of salaries and related personnel expenses, subcontracted research expenses, and technology license expenses. As of December 31, 1999, 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.

## STOCK COMPENSATION

During the years ended December 31, 1997, 1998 and 1999, in connection with the grant of stock options to employees and directors, we recorded deferred stock compensation totaling \$449,000, \$780,000 and \$1.5 million, respectively, representing the difference between the fair value of our 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 the graded vesting method. The graded 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 our common stock for purposes of this calculation was determined based on the business factors underlying the value of our common stock on the date such option grants were made, viewed in light of this offering and the expected initial public offering price per share. We recorded amortization of deferred stock compensation of \$46,000, \$410,000 and \$519,000, for the years ended December 31, 1997, 1998 and 1999, respectively. At December 31, 1999, we had a total of \$1.7 million remaining to be amortized over the vesting periods of the stock options. Through March 13, 2000 we recorded additional deferred stock compensation of \$5.8 million in connection with grants of stock options subsequent to December 31, 1999 and we may record additional deferred stock compensation for options granted prior to the closing of this offering. You should read Note 4 of Notes to Financial Statements for more information.

### DEEMED DIVIDEND UPON ISSUANCE OF CONVERTIBLE PREFERRED STOCK

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 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.

Also, in January 2000, Sangamo sold an additional 333,333 shares of its Series C convertible preferred stock to a member of its Board of Directors 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, 1999 and 1998

Total revenues. Total revenues consist of revenues from collaboration agreements and federal government research grants. Revenues from our Universal GeneTools agreements were \$1.0 million in 1999, compared with \$150,000 during 1998, an increase of \$850,000. The increase in 1999 was principally attributable to revenues recognized from collaboration agreements signed since the third quarter of 1998. We expect revenues from these agreements to continue to increase as additional agreements are signed or existing agreements are expanded. Federal government research grant revenues were \$1.2 million in 1999, compared to \$1.9 million in 1998, a decrease of \$706,000. The decrease in 1999 was principally due to an increased focus on Universal GeneTools collaborations and strategic partners in 1999 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 \$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 increased by \$585,000, from \$1.2 million in 1998 to \$1.8 million in 1999. This increase was primarily attributable to increased staffing to support our expanded research and development activities and development of our Universal Gene Recognition technology. 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 decreased by \$42,000 from \$173,000 in 1998 to \$131,000 in 1999. The decrease in interest income, net resulted from lower average interest-bearing balances and higher debt balances during 1999.

Years Ended December 31, 1998 and 1997

Total revenues. Federal government research grant revenues increased by \$736,000 from \$1.2 million in 1997 to \$1.9 million in 1998. This increase was principally attributable to revenue from new federal government research grants, including a grant from the Department of Commerce under the Advanced Technology Program initiated in late 1997.

Research and development expenses. Research and development expenses increased \$2.6 million from \$1.7 million in 1997 to \$4.3 million in 1998. This increase was primarily attributable to increases in staffing as we added additional employees to invest in the development of our Universal Gene Recognition technology platform. In addition, we incurred additional expense from expanded laboratory facilities in 1998, our first full year in our new facility in Richmond, California.

General and administrative expenses. General and administrative expenses increased by \$440,000 from \$797,000 in 1997 to \$1.2 million in 1998. This increase reflected increased administrative staffing in support of our expanding research and development activities.

Interest income (expense), net. Interest income (expense), net increased by \$228,000 from net interest expense of \$55,000 in 1997 to net interest income of \$173,000 in 1998. This increase was due to higher interest-bearing balances as a result of preferred stock financings in late 1997, as well as the elimination of interest expense as a result of conversion of a bridge loan into preferred stock in the 1997 financings.

We incurred net operating losses in 1997, 1998 and 1999 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 private placements of preferred stock, federal government research grants, payments from Universal GeneTools collaborators and a strategic partner and financing activities such as a bank line of credit. As of December 31, 1999, we had cash, cash equivalents and short-term investments totaling \$7.5 million.

Net cash used in operating activities was \$2.4 million for 1999, \$3.2 million in 1998 and \$818,000 in 1997. 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 \$6.0 million in 1999, \$2.2 million in 1998 and \$124,000 in 1997. Cash was used during these periods to purchase short-term investments and property and equipment.

Net cash provided by financing activities during 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. Net cash provided by financing activities in 1997 was \$6.9 million primarily from proceeds from the private placement of preferred stock.

We believe that the net proceeds of this offering, together with available cash resources, funds received under federal government research grants and from Universal GeneTools collaborators and a strategic partner are sufficient to finance our operations for at least two years. To date, we have been awarded research grants from the National Institute of Standards and Technology and the National Institutes of Health amounting to approximately \$5.6 million, of which approximately \$5.0 million has been used from our inception through December 31, 1999. We may need to raise substantial additional capital to fund subsequent operations. Funding, however, may not be available on favorable terms, if at

As of December 31, 1999, we had federal and state net operating loss carryforwards of approximately \$7.9 million to offset future taxable income. We also had federal research and development tax credit carryforwards of approximately \$100,000. 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.

## DISCLOSURE ABOUT MARKET RISK

Our exposure to market risk for changes in interest rates relates primarily to our cash equivalents and short-term investments. The short-term 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 short-term investments have a fixed interest rate and are carried at market value, which approximates cost. Our investment portfolio at December 31, 1999 had an average maturity of 104 days, and therefore we believe we have insignificant market risk. If market interest rates were to increase by 1% from December 31, 1999, the fair value of our portfolio would decline by less than \$25,000. 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.

## YEAR 2000 ISSUES

We did not experience any significant problems associated with Year 2000 issues, and we are not aware that any of our vendors or suppliers experienced any of these problems. We do not believe that any Year 2000 issues are likely to have a material effect on our business, financial condition or results of operations.

#### BUSTNESS

#### OVERVIEW

Sangamo is a leader in the research and development of transcription factors for the regulation of genes. Our Universal Gene Recognition platform is a proprietary technology based on engineering a 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, therapeutics for the treatment of human diseases, clinical diagnostics and agricultural and industrial biotechnology. We intend to commercialize our technology broadly over its many applications.

#### BACKGROUND

Genes and Gene Expression. Deoxyribonucleic acid, or DNA, is present in all living 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 a large percentage of the targets for pharmaceutical drug discovery.

The human body is composed of specialized cells that perform different functions and are thus organized into tissues and organs. All cells in the human body contain the same set of genes. It is believed, however, that only about 10% of these genes are turned on, or expressed, in an individual human cell. Genes are turned on or turned off, or 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 under- or over-expression of certain genes, can lead to disease.

Transcription Factors. Regulation of gene expression is controlled by proteins that bind to DNA called transcription factors. 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 virtually 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 is activated or repressed.

The Genomics Revolution. Genomics refers to the sequencing and functional analysis of the complete set of genes of diverse organisms throughout the animal and plant world. Enormous scientific and financial resources are being dedicated to the sequencing of all human genes, including the Human Genome Project and other publicly and privately funded genomics initiatives. It is expected that a preliminary sequence of the human genome will be completed in the year 2000.

Over the past decade, genomics research has produced a significant quantity of information on the location, sequence and structure of thousands of genes. The human genome may contain upwards of 140,000 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 information.

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

- accelerate the identification of drug targets from thousands of newly discovered genes whose functions are unknown;
- 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 poses a similar set of challenges and opportunities to agricultural biotechnology researchers, including identification of agriculturally important genes, the assessment of which genes may be commercially viable 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.

Commercial Opportunities Based on the Regulation of Gene Expression. The ability to regulate genes has the potential to enable far-reaching applications in the human healthcare, agricultural and industrial biotechnology sectors, including:

- discovery of new genes and analysis of how they function;
- therapeutic products for the regulation of disease-related genes;
- manufacture of pharmaceutical products;
- modifying cells for the selection of new drugs;
- DNA sequence detection for applications in pharmaceutical research and clinical diagnostics;
- engineering plants to improve their nutritional and growth properties; and
- manufacture of industrial chemicals using biological systems.

A technology enabling 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 that is enabled by the engineering of a class of transcription factors called zinc finger DNA binding proteins, or ZFPs. ZFP transcription factors 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 transcription factors is modelled on the structure of naturally occurring transcription factors in virtually all higher organisms.

## THE MODULAR STRUCTURE OF ZFP TRANSCRIPTION FACTORS

### [MODULAR STRUCTURE OF ZFP]

[The figure is a "bar-bell" type structure identifying the DNA domain and the functional domains of the ZFP transcription factor. Also included is a list of functional domains.]

Consistent with this two-domain structure, we take a modular approach to the design of ZFP transcription factors. The recognition domain is composed of one or more ZFPs. Each ZFP recognizes and binds to a three base pair sequence of DNA. Multiple ZFPs 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, which causes the ZFP transcription factor to control or regulate the gene in a desired manner. For instance, an activation domain causes a target gene to be activated. Alternatively, a repression domain causes the gene to be repressed. Similarly, a detection domain could be used to identify or detect the target DNA sequence in a diagnostic test. It is also possible to use the ZFP transcription factor 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.

In order to regulate a gene, the ZFP transcription factor 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 ZFPs into cells.

To date, we have generated hundreds 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 software and standardized methods for the assembly of ZFPs capable of binding to a

wide spectrum of DNA sequences. We have linked ZFPs to functional domains to create ZFP transcription factors and have demonstrated the ability of these ZFP transcription factors to regulate a limited number of commercially important genes. We have also shown that engineered ZFPs can detect discrete changes in medically interesting genes.

#### THE SANGAMO ADVANTAGE

We believe that the unique features of ZFP transcription factors will result in important technical advantages, as compared to alternative technologies. Among the advantages of our ZFP transcription factor-based approach to gene regulation are:

- ZFP transcription factors normally and naturally regulate genes in virtually 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 transcription factors can activate or repress genes, enhancing their versatility;
- ZFP transcription factors can be used to regulate gene expression in humans, animals, plants, microbes and viruses; and
- ZFP transcription factors can themselves be activated and repressed, allowing conditional and reversible regulation of a gene.

We believe that the technical advantages of Universal Gene Recognition will create leverage across multiple applications, products, markets and commercial partners:

### Pharmaceutical Discovery Research

- DISCOVERY OF NEW GENES AND TARGETS. ZFP transcription factors can be used to change patterns of gene expression in cells, to stimulate clinically interesting changes in these cells, and to determine the genes associated with these changes.
- VALIDATION OF GENE TARGETS. ZFP transcription factors can be used to target specific genes which is critical to researchers trying to confirm the function and validity of gene targets for drug development.
- ANIMAL MODELS OF HUMAN DISEASES. The reversible expression of ZFP transcription factors 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 selection of new pharmaceutical products.

## **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.
- MANUFACTURING OF PROTEIN PHARMACEUTICALS. We believe ZFP-engineered human cell lines can be used for production of commercially relevant protein pharmaceuticals.

## DNA Diagnostics

- SNP DETECTION. The specificity of ZFPs permits the detection of discrete changes 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.

- AUTOMATION. Unlike conventional DNA detection technologies, ZFPs recognize DNA in its natural form, which may permit a proprietary and automated approach to the development of DNA diagnostic assays.

## Agricultural and Industrial Biotechnology

- AGRICULTURAL BIOTECHNOLOGY. ZFP transcription factors 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 transcription factors may be used to regulate genes in yeast, other micro-organisms and plants which may permit the expanded use of engineered organisms for the manufacture of industrial chemicals.

#### OUR STRATEGY

Our strategic objective is to be the worldwide leader in the research and development of ZFP gene regulation technology and to commercialize this technology broadly. The key elements of our strategy are as follows:

Develop the Universal Gene Recognition Platform Across Multiple Applications. Our core competence, the generation of ZFP transcription factors for the regulation of genes in different organisms, creates leverage across many commercial applications. We intend to establish ZFP gene regulation as a widely accepted technology with applications and competitive advantages in each of our target markets.

Build the Technical Infrastructure of ZFP Gene Regulation. Our objective is to establish ZFPs as a widely used technology platform for the regulation of gene expression and DNA sequence detection. We are currently building an electronic "ZFP directory," or database that, when given a specific gene or DNA sequence, is designed to select optimal sites for ZFP binding and the corresponding ZFPs. Because of the modular nature of our engineered ZFP transcription factors, these ZFPs can be efficiently combined with a variety of functional domains, gene expression systems, and methods of delivery to target cells. We also intend to automate the assembly and testing of engineered ZFP transcription factors.

Develop Proprietary Drug Targets and Therapeutics. As we continue to build our technology platform and expand our revenue base through Universal GeneTools collaborations and strategic partnerships, we plan to apply ZFP transcription factors to the identification and validation of drug targets, and to the generation of proprietary data on new drug targets that can form the basis for future strategic partnerships as well as internal product development (see "Universal GeneTools for Pharmaceutical Discovery"). We also intend to develop ZFP transcription factors as human therapeutics for the direct regulation of disease-related genes (see "ZFP-Therapeutics").

Multi-tiered Business Model. We intend to leverage the broad applicability of ZFP gene regulation into commercial opportunities across multiple product markets. We are currently selling our proprietary Universal GeneTools on a non-exclusive basis to collaborators engaged in target validation for pharmaceutical discovery. We also intend to develop ZFP transcription factors for therapeutics with pharmaceutical and biotechnology companies on an exclusive basis in milestone-and royalty-based strategic partnerships. We plan to enter into several similar strategic partnerships across the pharmaceutical discovery, therapeutics for the treatment of human diseases, clinical diagnostics, and agricultural and industrial biotechnology markets. We further intend to capture

additional value through our proprietary programs, which we may commercialize directly or enter into partnerships at a later stage to increase the economic benefit we retain.

### COMMERCIAL APPLICATIONS

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

### SANGAMO'S BUSINESS PLATFORM

## [UNIVERSAL GENE RECOGNITION GRAPH]

[Graphic showing the four different commercial applications of our Universal Gene Recognition technology 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 issues 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;
- for validated drug targets, screening large collections of chemicals to identify chemical leads for drug development; and
- identifying variations in these gene sequences among patients and determining the relationship of these genetic variations with susceptibility to disease and probable response to drug therapy.

We believe that 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 transcription factors 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 transcription factors in gene regulation in several cell models of gene expression and our collaborators are applying the technology to target validation in animal models of human disease.

The use of ZFP transcription factors addresses a number of technical challenges associated with target validation studies in transgenic animals. Typically, transgenic animals are genetically engineered mice in which a target gene has been inactivated, or knocked out. Generating a knockout mouse is labor intensive and can take up to one year. We believe the generation time for mice which have been engineered with ZFP transcription factors, or ZFP-Transgenic mice, may be much faster than the generation time for standard knockouts. In addition, researchers should gain more information from ZFP-Transgenics because ZFP transcription factors can themselves be regulated thus permitting the regulation of a target gene in a reversible fashion. This conditional control of genes in ZFP transcription factors should be a distinct advantage for the functional study of genes required in normal development. Typically, if an essential gene is knocked out, the knockout mouse will not grow to maturity. With ZFP gene regulation, however, we believe researchers can 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 on ZFP-Transgenic models.

To date, we have entered into Universal GeneTools agreements with 18 leading pharmaceutical and biotechnology companies or their subsidiaries. These collaborators are applying our ZFP transcription factors to the validation of human gene targets for drug discovery. ZFP transcription factors 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 plan to incorporate ZFP transcription factors into appropriate cell lines for the purpose of screening chemical compounds for drug discovery. In particular, we plan to engineer 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 identification of 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 Libraries for Target Discovery

Pharmaceutical researchers are also interested in accelerating an important step in the first stages of genome-based drug discovery: the initial identification of new drug targets.

ZFP transcription factors can be used to change patterns of gene expression in cells, to stimulate clinically interesting changes in these cells, and to determine the genes associated with these changes. ZFP libraries are large collections of ZFP transcription factors that can be incorporated into populations of cells such that each cell receives one ZFP transcription factor. In any given cell, the ZFP transcription factor may change the function or health of the cell, causing it to change in appearance. The ZFP transcription factor that triggers this change can be purified, and its gene target identified. In this manner, these genes could be identified as potential targets for further study, validation, and drug screening.

We intend to commercialize our ZFP libraries by establishing strategic partnerships. We anticipate that ZFP libraries will be optimized by Sangamo scientists and used to identify targets in our partners' drug discovery programs. We also plan to use ZFP libraries to discover novel gene targets in our future, proprietary product development programs.

## **ZFP-Therapeutics**

The promise of genome-based drug discovery includes the increasing supply of new drug targets. ZFP transcription factors may offer a highly specific approach to regulation of disease-related genes. We are developing ZFP transcription factors for the treatment of human diseases, or ZFP-Therapeutics, for cardiovascular, viral, 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 400,000 Americans undergo angioplasty, or opening, of 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. In partnership with Edwards LifeScience, Inc., formerly the Cardiovascular Group of Baxter Healthcare Corporation, or Baxter, we are developing ZFP transcription factors designed to activate the expression of vascular endothelial growth factors, or VEGFs.

ZFP transcription factors for therapeutic angiogenesis may also be used in peripheral vascular diseases. We believe an advantage of the ZFP-Therapeutic approach is the potential ability to activate multiple genes as necessary to provide effective biological stimulation of angiogenesis. Our experiments on VEGF activation are ongoing.

## 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 more than 350 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 mortality. The risk of liver cancer in HBV carriers is estimated to be 100 times greater than in uninfected individuals.

In 1998, we initiated a research collaboration with Dr. Alan McLachlan of The Scripps Research Institute. The purpose of the collaboration is to evaluate our ZFP transcription factors designed to

repress the expression of HBV genes and viral replication in liver cells. Dr. McLachlan is an expert in the regulation of HBV gene expression and has developed several biological assays for the measurement of HBV gene expression and viral replication. Preliminary data suggest that our ZFP transcription factors can repress the expression of HBV genes in liver cells. We are continuing these studies to confirm and extend these results.

#### HIV Disease

HIV is the causative agent of AIDS, a disease that killed approximately 17,000 patients in the United States in 1998. Despite advances in pharmaceutical therapy, there are currently approximately 400,000 HIV-infected individuals in the United States and over 30 million people carrying the virus worldwide. The new combination therapies, known as cocktail therapies, have been demonstrated to be effective in clinical trials; however, the complexity of these regimens often results in poor patient compliance and reduced efficacy.

In collaboration with Dr. Leonid Stamatatos of the Aaron Diamond AIDS Research Center, we are testing our ZFP transcription factors designed to repress HIV gene expression in human cells. These transcription factors could provide the basis for the inhibition of HIV proliferation in patients infected with HIV. Preliminary data suggest these ZFP transcription factors can repress HIV gene expression in cells. Further experiments are ongoing.

In collaboration with Dr. Jeremy Berg of the Johns Hopkins University School of Medicine, we are also testing ZFP transcription factors designed to repress the expression of the human CCR5 gene, which encodes a protein used by HIV to gain entry into cells of the immune system. Repression of CCR5 expression in immune system cells may prevent HIV infection of these cells. Preliminary data suggest that our ZFP transcription factors can repress CCR5 gene expression in cells. Further experiments are ongoing.

Repression of Angiogenesis for Diabetic Retinopathy and Cancer

In contrast to cardiovascular disease, there are diseases that might benefit from the inhibition of angiogenesis. 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 secretion of angiogenic factors such as VEGF. We believe that ZFP transcription factors designed to repress the expression of VEGF and other angiogenic factors may reverse this process.

Solid tumors require the ingrowth of new blood vessels if they are to grow beyond even a few millimeters in diameter. Tumor cells frequently signal for additional blood supply by secreting VEGF. Repression of VEGF expression in tumor cells with ZFP-Therapeutics may prevent this angiogenesis and slow or halt solid tumor growth.

We have designed multiple ZFP transcription factors designed to repress the expression of the VEGF gene. These ZFP transcription factors have shown repression of VEGF expression in cultured human cells. We intend to test this same approach in animal models of angiogenesis and cancer and, if successful, to enter into human clinical trials with a future strategic partner.

# Commercialization of ZFP-Therapeutics

We plan to develop and commercialize ZFP-Therapeutics in partnership with pharmaceutical and biotechnology companies. 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 may retain commercial rights to some of these products.

ZFP-Engineered Cell Lines for the Production of Protein Pharmaceuticals

Protein pharmaceuticals manufactured with genetically modified cells now account for more than \$10 billion in annual worldwide sales. By using ZFP transcription factors to activate the expression of genes encoding therapeutic proteins in human cells, we are able to genetically engineer cells for production of protein pharmaceuticals. We plan to develop ZFP-engineered cell lines for production of commercially relevant proteins in partnership with pharmaceutical and biotechnology companies.

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. It is now believed that some SNPs may be 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. In addition, ZFPs bind to DNA in its natural form, permitting simplified preparation of DNA for analysis. Further, ZFPs are stable proteins and therefore amenable to the types of assays and instrumentation used in standard clinical and molecular biology laboratories. Combined with sensitive detection technologies, 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 Agricultural and Industrial Biotechnology

Agricultural Biotechnology

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.

ZFP transcription factors are a central mode of gene regulation in plants. The ability to identify and subsequently regulate the expression of genes with ZFP transcription factors 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 transcription factors may be used to confirm the role of newly discovered genes in plant growth, metabolism and resistance to pathogens.

Modification of fatty acid composition in soybean seed oil is an example of this approach. Americans annually consume approximately 7.0 million metric tons of soybean seed oil. This oil is low in monounsaturated fatty acids as compared with the oil extracted from other seeds, and has reduced value because it must be chemically modified for some applications. Therefore, a genetically modified strain of soybean that yielded a higher mix of monounsaturated fatty acids in its seed oil would be highly desirable. FAD2-1 is a soybean gene that encodes an enzyme responsible for lowering the levels of monounsaturated fatty acids. We have generated ZFP transcription factors designed to recognize the FAD2-1 gene and repress its expression in soybean seed. We have initiated studies of FAD2-1 repression in soybeans.

To commercialize ZFP transcription factors in agricultural biotechnology, we intend to seek strategic relationships with corporate partners having capabilities in the research, development and commercialization of agricultural products.

## 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, which provide the raw material for the production of many chemical feedstocks 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. We believe ZFP transcription factors are well suited to this task because of their natural ability to discriminate among closely related genes and their ability to regulate gene expression in a reversible fashion.

We believe that ZFP transcription factors will 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 the ZFP technology platform in several commercial applications where the products provide 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.

## Baxter CardioVascular Group Strategic Partnership

In January 2000, we announced the initiation of a multiyear, therapeutic product development collaboration with Edwards LifeScience, Inc., formerly the CardioVascular Group of Baxter Healthcare Corporation. Under the agreement, we have licensed to Baxter on a worldwide, exclusive basis ZFP-Therapeutics developed under this agreement for use in the activation of VEGFs and VEGF receptors in cardiovascular and peripheral vascular diseases. In addition, Baxter has purchased a \$5 million convertible note which will convert, together with accrued interest, into common stock upon consummation of this offering. Also, we have received an initial \$1 million, and may receive an additional \$1 million, in research funding from Baxter. We will be responsible for advancing product

candidates into preclinical animal testing. Baxter will be responsible for preclinical development, regulatory affairs, clinical development and the sales and marketing of the ZFP-Therapeutic products. In March 2000, Baxter exercised an option by purchasing a \$7.5 million convertible note which will convert, together with accrued interest, into common stock upon consummation of this offering for a right of first refusal for three years to negotiate a license for additional ZFP-Therapeutics in cardiovascular and peripheral vascular diseases. In the future, we may receive up to \$29 million in milestone payments in connection with the development and commercialization of the first product under this agreement, and up to an additional \$15 million in milestone payments in connection with the commercialization of some subsequent licensed products. Sangamo will also receive royalties on product sales. There is no assurance that we and Baxter will achieve our development and commercialization milestones. Baxter 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 transcription factor which is capable of regulating the expression of a gene for which it is specifically designed and targeted.

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 at least two ZFP transcription factors 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 transcription factors;
- 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 transcription factors 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 transcription factors during the design stage, and complete their payment after receipt of the ZFP transcription factors. The agreements do not provide for milestone or royalty payments;

For fiscal year 1999, we recognized \$1.0 million in revenues from these Universal GeneTools agreements.

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."

We have entered into Universal GeneTools collaborations with 18 leading pharmaceutical or biotechnology companies or their subsidiaries.

#### RESEARCH GRANTS

We have received awards and government grants during the past several years that have totaled approximately \$5.6 million. These grants have provided non-dilutive research funding to develop our technology platform for specific applications, primarily in the areas of diagnostics and anti-viral therapeutics.

## SUMMARY OF MAJOR U.S. GOVERNMENT GRANTS

AREA OF GRANT	GRANTING AGENCY	DESCRIPTION	GRANT DATE	DOLLAR AMOUNT
DNA Diagnostics	National Institute of Standards and Technology	Generation and development of novel nucleic acid binding proteins and their use as DNA diagnostics	August 1995 (completed)	\$2,000,000
Antiviral Therapeutics	National Institute of Standards and Technology	Development of novel DNA binding proteins as antiviral therapeutics targeting HIV and Hepatitis B	May 1997	\$2,000,000
HIV	National Institutes of Health	Designer DNA binding proteins targeting HIV genes	May 1998	\$ 533,000
Agriculture	U.S. Department of Agriculture	Demonstrating commercial potential of ZFPs for generating value added crops	September 1999	\$ 220,000

## 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 design, composition and use of ZFPs and ZFP transcription factors 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 many ZFPs and ZFP transcription factors under seven families of patent filings. All of these patent families have been filed in the United States and four have been filed internationally in selected countries. These patent filings have resulted in three 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, identification and use of ZFPs.

We also have pending eight families of U.S. patent filings assigned to us, three of which have been filed internationally in selected countries to date, directed to improvements in the design and use of ZFPs and ZFP transcription factors. 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 assist in the commercial development of ZFPs and ZFP transcription factors. 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 generate internally intellectual property covering the design, selection, generation and composition of ZFPs, the genes encoding these proteins and the application of ZFPs and ZFP transcription factors 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 suits, 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 are 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 are being 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, 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 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 transcription factors 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

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 were recently 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."

### EMPL OYEES

As of March 14, 2000, we had 45 full-time employees, 14 of whom hold Ph.D. degrees and 35 of whom hold other graduate or technical degrees. Of our total workforce, 38 are engaged in research and development activities and seven 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.

## **FACILITIES**

We lease approximately 15,000 square feet of research and office space located at 501 Canal Boulevard in Richmond, California under two separate leases. The leases expire in 2004. We believe that the facilities we currently lease are sufficient for approximately the next 24 months.

## LEGAL PROCEEDINGS

We are not a party to any material litigation.

#### MANAGEMENT

#### EXECUTIVE OFFICERS AND DIRECTORS

The following table sets forth information regarding our executive officers, directors and key employees as of March 14, 2000:

NAME	AGE	POSITION
Educad O Longhiou II	40	Dunaidant Chief Evenutive Officer and Divertor
Edward O. Lanphier II		President, Chief Executive Officer and Director
Alan P. Wolffe, Ph.D	40	Senior Vice President and Chief Scientific Officer
Casey C. Case, Ph.D	44	Vice President, Research
Peter Bluford	45	Vice President, Corporate Development
Shawn K. Johnson	32	Director of Finance
Eric T. Rhodes	39	Director of Commercial Development
S. Kaye Spratt, Ph.D	47	Director of Delivery Technology
Herbert W. Boyer, Ph.D	63	Director
William G. Gerber, M.D	53	Director
John W. Larson	64	Director
William J. Rutter, Ph.D	71	Director
Michael C. Wood	47	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 inception. Mr. Lanphier has eighteen 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 chromosonal 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.

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.

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.

Shawn K. Johnson has served as Director of Finance since December 1997. From July 1995 to October 1997, Mr. Johnson was Director of Finance at Neurobiological Technologies, Inc., a neuroscience company developing drugs. From July 1993 to June 1995, he managed various accounting functions for Glycomed, Inc., a pharmaceutical company. Prior to Glycomed, Mr. Johnson was the Controller for Cognitive Systems, Inc., a software technology company. He holds an M.B.A. from the University of California, Berkeley and a B.S. in accounting from City University in Bellevue, Washington.

Eric T. Rhodes has served as Director of Commercial Development since 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.

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

Diagram is entitled "Universal Gene Recognition(TM)." Immediately below reads,
"Engineered ZFP(TM) Transcription Factors." A line leads from that language to
four boxes containing, respectively from left to right: "Universal Gene Tools,"
"ZFP Therapeutics," "ZFP Diagnostics," and "Agricultural and Industrial
Biotechnology." Below the "Universal Gene Tools" box is a bulleted list: "Drug
Target Discovery," "Drug Target Validation," and "Pharmaceutical Discovery."
Below the "ZFP Therapeutics" box is a bulleted list: "Therapeutic Regulation of
Disease-Related Genes," "Activation," "Repression," "Reversible Control," and
"Pharmaceutical Protein Production." Below the "ZFP Diagnostics" box is a
bulleted list: "Clinical Diagnostics" and "Pharmcogenomics." Below the
"Agricultural and Industrial Biotechnology" box is a bulleted list:
"Agrochemical Discovery," "ZFP-Transgenic Plants," and "Biological Production of
Industrial Chemicals."

In the top left corner is the title "Universal Gene Recognition Technology Platform." Immediately below the title reads, "ZFP, zinc finger DNA binding protein, transcription factors regulate the expression of clinically and commercially important genes." To the right of that language is a short coil on top of a thin cylinder, with "A single zinc finger recognizes three base pairs, 3 bp, of DNA" immediately below. To the right of that is a medium length series of coils on top of a thin cylinder, with "Three zinc fingers recognize nine base pairs, 9 bp, of DNA. ZFPs can be linked together to recognize longer sequences of DNA" immediately below. Near the top right corner is a long series of coils on top of a thin cylinder labeled "Recognition domain." Immediately below reads, "ZFP transcription factors have two parts:" along with two bulleted points, "The ZFP recognition domain directs the ZFP to its target site in the DNA" and "The functional domain causes the target gene to be activated or repressed." To the right of the long series of coils is an oval, labeled "Functional domain," with an arrow pointing to the coils.

In the left portion of the diagram is a double helix. Above and to the left of the double helix states, "Different sets of genes are expressed in different cell types. It is this pattern of gene expression that determines the structure, biological function and health of all cells, tissues and organisms. Genes are regulated, either activated or repressed, by DNA binding proteins called transcription factors." To the right of that is a large coil on top of half a tube divided lengthwise. Immediately below is a multi-colored strand. Above and to the right reads, "Sangamo scientists design ZFP transcription factors to recognize and regulate target genes." Below and to the right of the images is the coil shown on top of the strand with the cylindrical portion below it highlighted.

To the right of the middle is a long double helix with half of one helix multi-colored. Resting on the multi-colored portion is a series of coils. To the left of the coils is a green oval with a plus sign in the middle and a line connecting it to the left-most portion of the coils. Immediately above this image reads, "Once the ZFP transcription factor binds to its target DNA sequence, it can regulate the target gene in a variety of ways. For example, the target gene can be activated..."

To the right of the long double helix is a shorter double helix with half of one helix multi-colored. Resting on the multi-colored portion is a series of coils. To the left of the coils is a red oval with a minus sign in the middle and a line connecting it to the left-most portion of the coils. Immediately above this image reads, "...or repressed."

In the bottom right corner of the diagram reads, "ZFP transcription factors can:" followed by bulleted points: "Activate genes," "Repress genes," "Switch genes on or off temporarily," and "Detect specific DNA sequences." Below this list reads, "The ability of engineered ZFPs to recognize and regulate genes has broad-based applications in pharmaceutical discovery, therapeutics for the treatment of human diseases, clinical diagnostics, and agricultural and industrial biotechnology."

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 Pharmaceuticals, 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.

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 its 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 since 1992, on the Board of Trustees at the Carnegie Institution of Washington since 1995 and several private company boards. 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 Knowledge Kids 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 transcription factors 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.

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 chromosonal 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.

## BOARD COMMITTEES

Audit Committee. We have established an audit committee composed of independent directors that review and supervise our financial controls, including the selection of our auditors, reviews our books and accounts, meets with our officers regarding our financial controls, acts upon recommendations of our auditors and takes further actions as the audit committee deems necessary to complete an audit of our books and accounts, as well as other matters that may come before it or as directed by the board. The audit committee currently consists of Dr. Gerber, Dr. Rutter and Mr. Wood.

Compensation Committee. We have also established a compensation committee that reviews and approves the compensation and benefits for our executive officers, administers our compensation and stock plans, makes recommendations to the board of directors regarding such matters and performs other duties as may from time-to-time be determined by the board. The compensation committee currently consists of Dr. Boyer and Mr. Larson.

#### COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The members of the compensation committee of the board of directors are Dr. Boyer and Mr. Larson. None of our compensation committee members has been an officer or employee of Sangamo at any time. Mr. Larson is a senior partner at Brobeck, Phleger & Harrison LLP, our legal counsel. None of our executive officers serves on the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board or our compensation committee.

### COMPENSATION OF DIRECTORS

Other than expenses in connection with attendance at meetings and other customary expenses, we currently do not compensate any non-employee member of the board. Directors who are also employees do not receive additional compensation for serving as directors.

Under our 2000 Stock Incentive Plan, non-employee directors will receive automatic option grants upon becoming directors each of which is determined by the board of directors and 10,000 shares on the date of each annual meeting of stockholders. The 2000 Stock Incentive Plan also contains a director fee option grant program. Should this program be activated in the future, each non-employee board member will have the opportunity to apply all or a portion of any annual retainer fee otherwise payable in cash to the acquisition of an option with an exercise price below the then fair market value of our shares. Non-employee directors will also be eligible to receive discretionary option grants and direct stock issuances under our 2000 Stock Incentive Plan. See "Management -- Stock Plans."

## EXECUTIVE COMPENSATION

The following table sets forth information concerning compensation earned during the fiscal year ended December 31, 1999 by our Chief Executive Officer and our other executive officers whose total annual compensation exceeded \$100,000.

### SUMMARY COMPENSATION TABLE

				LONG-TERM COMPENSATION AWARDS		
	FISCAL	ANNUAL COM	PENSATION	SECURITIES UNDERLYING	(	OTHER
NAME AND PRINCIPAL POSITION	YEAR	SALARY	BONUS	OPTIONS	COME	PENSATION
Edward O. Lanphier II President and Chief Executive Officer	1999	\$195,000	\$73,788		\$	12,500
Casey C. Case, Ph.D Vice President, Research	1999	131,250	10,000	30,000		
Peter Bluford Vice President, Corporate Development	1999	120,750	10,000	40,000		

On January 4, 1998, Mr. Lanphier received a loan from us in the principal amount of \$250,000. The loan bears interest at a rate of 6% per year. As a special bonus program for Mr. Lanphier the balance of the loan will be forgiven in forty-eight equal monthly installments of principal, together with accrued interest for the year, upon completion of each month of employment with us over the forty-eight month period measured from the date the loan was made. Accordingly, Mr. Lanphier's

reported bonus amount represents the \$73,788 of loan forgiveness which occurred on December 31, 1999.

Other compensation for Mr. Lanphier consists of an insurance premium paid by Sangamo on a split dollar life insurance policy. Sangamo will be reimbursed for these insurance premiums out of the cash surrender value of its policy paid by Mr. Lanphier during his lifetime or out of the proceeds paid under the policy upon his death. The face amount of the insurance policy is \$2.0 million.

#### OPTION GRANTS

The following table sets forth summary information regarding the option grants made to our Chief Executive Officer and the other executive officers whose total annual compensation exceeded \$100,000 for 1999. Options granted under our 1995 Stock Option Plan are generally immediately exercisable for all the option shares by the optionee but exercised shares are subject to a right of repurchase according to the vesting schedule of each specific grant. In the event that a purchaser ceases to provide service to Sangamo, we have the right to repurchase any of that person's unvested shares of common stock at the original option exercise price. The exercise price per share is equal to the fair market value of our common stock on the date of grant as determined by our board of directors. Twenty-five percent of the option shares vest on the one year anniversary of employment and the remainder vest in a series of equal monthly installments beginning on the one year anniversary of employment and continuing over the next three years of service. The percentage of total options was calculated based on options to purchase an aggregate of 305,500 shares of common stock granted to employees under our 1995 Stock Option Plan in 1999. The potential realizable value was calculated based on the ten-year term of the options and assumed rates of stock appreciation of 5% and 10%, compounded annually from the date the options were granted to their expiration date based on the fair market value of the common stock on the date of grant.

### OPTION GRANTS IN 1999

					VALU	IE AT
					ASSUMED	ANNUAL
					RATE	S OF
	NUMBER OF	PERCENTAGE OF			ST0CK	PRICE
	SECURITIES	TOTAL OPTIONS			APPRECIA	TION FOR
	UNDERLYING	GRANTED TO			OPTI0	N TERM
	OPTIONS	EMPLOYEES IN	EXERCISE PRICE	<b>EXPIRATION</b>		
NAME	GRANTED	FISCAL 1999	(PER SHARE)	DATE	5%	10%
Edward O. Lanphier II		%	\$		\$	\$
Casey C. Case, Ph.D	30,000	9.8	0.225	12/8/09	4,245	10,758
Peter Bluford	40,000	13.1	0.225	12/8/09	5,660	14,343

POTENTIAL REALIZABLE

#### FISCAL YEAR-END 1999 OPTION VALUES

The following table sets forth summary information regarding the number and value of options held as of December 31, 1999 for our Chief Executive Officer and our most highly compensated executive officers whose total annual compensation exceeded \$100,000. Our Chief Executive Officer and our most highly compensated executive officers did not acquire any shares upon exercise of options in 1999. Amounts shown in the value of unexercised in-the-money options at December 31, 1999 column are based on \$0.225, the fair market value of the common stock as of December 31, 1999, multiplied by the number of shares underlying the option, less the aggregate exercise price payable for these shares.

#### 1999 OPTION VALUES

	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT DECEMBER 31, 1999			VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT DECEMBER 31, 1999		
NAME	EXERCISABLE	UNEXERCISABLE	EXE	RCISABLE	UNEXE	RCISABLE
Edward O. Lanphier II	400,000		\$	24,000	\$	
Casey C. Case, Ph.D	210,000			13,500		
Peter Bluford	260,000			31,500		

## STOCK PLANS

2000 STOCK INCENTIVE PLAN. The 2000 Stock Incentive Plan is intended to serve as the successor program to our 1995 Stock Option Plan. The 2000 Stock Incentive Plan was adopted by the board in February 2000 and was approved by the stockholders in March 2000. The 2000 Stock Incentive Plan will become effective when the underwriting agreement for this offering is signed. At that time, all outstanding options under our 1995 Stock Option Plan will be transferred to the 2000 Stock Incentive Plan, and no further option grants will be made under the 1995 Stock Option Plan. The transferred options will continue to be governed by their existing terms, unless our compensation committee decides to extend one or more features of the 2000 Stock Incentive Plan to those options. Except as otherwise noted below, the transferred options from the 2000 Stock Incentive Plan have substantially the same terms as will be in effect for grants made under the discretionary option grant program of our 2000 Stock Incentive Plan.

## Authorized shares

A total of 3,635,832 shares of our common stock have been authorized for issuance under the 2000 Stock Incentive Plan. This share reserve consists of the number of shares we estimate will be carried over from the 1995 Stock Option Plan including the shares subject to outstanding options thereunder, plus an additional increase of approximately 1,603,926 shares. The number of shares authorized for issuance under our 2000 Stock Incentive Plan will automatically increase on the first trading day of the fiscal year, beginning in 2001, by an amount equal to three and one-half percent of the total number of shares of our common stock outstanding on the last trading day immediately preceding fiscal year, but in no event will this annual increase exceed 2,000,000 shares. In addition, the 2000 Stock Incentive Plan prohibits stock option grants or direct stock issuances for more than 2,000,000 shares of common stock in total in any calendar year.

### Stock Options

Our 2000 Stock Incentive Plan has five separate programs:

- the discretionary option grant program, under which eligible individuals in our employ may be granted options to purchase shares of our common stock at an exercise price not less than the fair market value of those shares on the grant date;
- the stock issuance program, under which eligible individuals may be issued shares of common stock directly through the purchase of such shares at a price not less than 100% of the then fair market value at time of issuance or as a bonus tied to the attainment of performance milestones or the completion of a specified period of services;
- the salary investment option grant program, under which our executive officers and other highly compensated employees may be given the opportunity to apply a portion of their base salary each year to the acquisition of special below market stock option grants;
- the automatic option grant program, under which option grants will automatically be made at periodic intervals to eligible non-employee members of our board of directors to purchase shares of common stock at an exercise price equal to the fair market value of those shares on the grant date; and
- the director fee option grant program, under which non-employee members of our board of directors may be given the opportunity to apply a portion of any retainer fee otherwise payable to them in cash each year to the acquisition of special below-market option grants.

The individuals eligible to participate in our 2000 Stock Incentive Plan include our officers and other employees, our board members and any consultants we hire.

### Plan Administration

The discretionary option grant and stock issuance programs will be administered by our compensation committee. This committee will determine which eligible individuals are to receive option grants or stock issuances under those programs, the time or times when the grants or issuances are to be made, the number of shares subject to each grant or issuance, the status of any granted option as either an incentive stock option or a non-statutory stock option under the federal tax laws, the vesting schedule to be in effect for the option grant or stock issuance and the maximum term for which any granted option is to remain outstanding. The compensation committee will also have the authority to select the executive officers and other highly compensated employees who may participate in the salary investment option grant program if that program is put into effect for one or more calendar years.

Our 2000 Stock Incentive Plan will include the following features:

- The exercise price for any options granted under the 2000 Stock Incentive Plan may be paid in cash or in shares of our common stock valued at fair market value on the exercise date. The option may also be exercised through a same-day sale program without any cash outlay by the optionees. The compensation committee may provide financial assistance to one or more optionees in the exercise of their options by allowing such individuals to deliver full-recourse interest-bearing promissory notes in payment of the exercise price and any associated withholding taxes.
- The compensation committee will have the authority to cancel outstanding options under the discretionary option grant program, including any transferred options from our 1995 Stock Option Plan, in return for the grant of new options for the same or a different number of option shares with an exercise price per share based upon the fair market value of our common stock on the new grant date.

- Stock appreciation rights may be issued under the discretionary option grant program. These rights will provide the holders with the election to surrender their outstanding options for a payment from us equal to the fair market value of the shares subject to the surrendered options less the exercise price payable for those shares. We may make the payment in cash or in shares of our common stock. None of the options under our 1995 Stock Option Plan have any stock appreciation rights.

### Changes in Control

The 2000 Stock Incentive Plan will include the following change in control provisions which may result in the accelerated vesting of outstanding option grants and stock issuances:

- If we are acquired by merger or asset sale, each outstanding option under the discretionary option grant program which is not to be assumed by the successor corporation will immediately become exercisable for all the option shares, and all outstanding unvested shares will immediately vest, except to the extent our repurchase rights with respect to those shares are to be assigned to the successor corporation.
- The compensation committee will have complete discretion to grant one or more options that will become exercisable for all the option shares if those options are assumed in the acquisition but the optionee's service with us or the acquiring entity is subsequently terminated. The vesting of any outstanding shares under the stock issuance programs may be accelerated upon similar terms and conditions. The compensation committee will also have the authority to grant options which will immediately vest in the event we are acquired, whether or not those options are assumed.
- The compensation committee may grant options and structure repurchase rights so that the shares subject to those options or repurchase rights will immediately vest in connection with a successful tender offer for more than 50% of our outstanding voting stock or a change in the majority of our board through one or more contested elections. This accelerated vesting may occur either at the time of this type of transaction or upon the subsequent termination of the individual's service.
- If we are acquired by merger or asset sale, the options currently outstanding under the 1995 Stock Option Plan will accelerate in full if the options are not assumed by the acquiring entity and the optionee's employment with us is involuntarily terminated within 12 months following the acquisition. If the options are not so assumed, they will accelerate and become exercisable for fully vested shares immediately before the acquisition and will terminate upon the completion of the acquisition.

## Salary Investment Option Grant Program

If the compensation committee decides to put the salary investment option grant program into effect for one or more calendar years, each of our executive officers and other highly compensated employees may elect to reduce his or her base salary for the calendar year by an amount not less than \$10,000 nor more than \$50,000. Each selected individual who makes this election will automatically be granted, on the first trading day in January of the calendar year for which his or her salary reduction is to be in effect, an option to purchase that number of shares of common stock determined by dividing the salary reduction amount by two-thirds of the fair market value per share of our common stock on the grant date. The option will have an exercise price per share equal to one-third of the fair market value of the option shares on the grant date. As a result, the option will be structured so that the fair market value of the option shares on the grant date less the exercise price payable for those shares will be equal to the amount of the salary reduction. The option will

become exercisable in a series of twelve equal monthly installments over the calendar year for which the salary reduction is to be in effect.

#### Automatic Option Grant Program

Under the automatic option grant program, each individual who first becomes a non-employee board member at any time after the effective date of this offering will receive an option grant to purchase the number of shares of common stock as determined by the board on the date the individual joins the board. In addition, on the date of each annual stockholders meeting held in 2001 and thereafter, each non-employee board member who is to continue to serve as a non-employee board member, including each of our current non-employee board members, will automatically be granted an option to purchase 10,000 shares of common stock, provided the individual has served on the board for at least six months

Each automatic grant will have an exercise price per share equal to the fair market value per share of our common stock on the grant date and will have a term of 10 years, subject to earlier termination following the optionee's cessation of board service. The option will be immediately exercisable for all of the option shares; however, we may repurchase, at the exercise price paid per share, any shares purchased under the option which are not vested at the time of the optionee's cessation of board service. The shares subject to each initial option grant will vest in a series of 36 equal monthly installments upon the optionee's completion of each month of board service measured from the grant date. The shares subject to each 10,000 share annual option grant will vest in a series of 12 equal monthly installments upon completion of each month of board service over the 12-month period measured from the grant date. The shares subject to each option will immediately vest in full over the 36-month period upon the optionee's death or disability while a board member.

### Director Fee Option Grant Program

If the director fee option grant program is put into effect in the future, then each non-employee board member may elect to apply all or a portion of any cash retainer fee for the year to the acquisition of a below-market option grant. The option grant will automatically be made on the first trading day in January in the year for which the retainer fee would otherwise be payable in cash. The option will have an exercise price per share equal to one-third of the fair market value of the option shares on the grant date, and the number of shares subject to the option will be determined by dividing the amount of the retainer fee applied to the program by two-thirds of the fair market value per share of our common stock on the grant date. As a result, the option will be structured so that the fair market value of the option shares on the grant date less the exercise price payable for those shares will be equal to the portion of the retainer fee applied to that option. The option will become exercisable in a series of 12 equal monthly installments over the calendar year for which the election is in effect. The option, however, will become immediately exercisable for all the option shares upon the death or disability of the optionee while serving as a board member.

Our 2000 Stock Incentive Plan will also have the following features:

- Outstanding options under the salary investment option grant program and the automatic and director fee option grant programs will immediately vest if we are acquired by a merger or asset sale or if there is a successful tender offer for more than 50% of our outstanding voting stock or a change in the majority of our board through one or more contested elections.
- Limited stock appreciation rights will automatically be included as part of each grant made under the salary investment option grant program and the automatic and director fee option grant programs, and these rights may also be granted to one or more officers as part of their option grants under the discretionary option grant program. Options with this feature may be

surrendered to us upon the successful completion of a hostile tender offer for more than 50% of our outstanding voting stock. In return for the surrendered option, the optionee will be entitled to a cash distribution from us in an amount per surrendered option share based upon the highest price per share of our common stock paid in that tender offer.

- The board may amend or modify the 2000 Stock Incentive Plan at any time, subject to any required stockholder approval. The 2000 Stock Incentive Plan will terminate no later than February 7, 2010.

EMPLOYEE STOCK PURCHASE PLAN. Our Employee Stock Purchase Plan was adopted by the board in February 2000 and approved by the stockholders in March 2000. The Employee Stock Purchase Plan will become effective immediately upon the signing of the underwriting agreement for this offering. The plan is designed to allow our eligible employees and the eligible employees in our participating subsidiaries, if any, to purchase shares of common stock, at semi-annual intervals, with their accumulated payroll deductions.

### Authorized Shares

A total of 400,000 shares of our common stock will initially be reserved for issuance under our Employee Stock Purchase Plan. The reserve will automatically increase on the first trading day of the second fiscal quarter each year, beginning in the year 2001, by an amount equal to one percent of the total number of outstanding shares of our common stock on the last trading day of the immediately preceding first fiscal quarter. In no event will any annual reserve increase exceed 600,000 shares.

### Plan Administration

The plan will have a series of successive overlapping offering periods, with a new offering period beginning on the first business day of May and November of each year. Each offering period will continue for a period of 24 months, unless otherwise determined by our compensation committee. The initial offering period, however, will start on the date the underwriting agreement for this offering is signed and will end on the last business day of April 2002. The next offering period will start on the first business day of November 2000.

Individuals scheduled to work more than 20 hours per week for more than five calendar months per year may join an offering period on the start date of that period. Employees may participate in only one offering period at any time.

A participant may contribute up to 15% of his or her cash earnings through payroll deductions, and the accumulated deductions will be applied to the purchase of shares on each semi-annual purchase date. Semi-annual purchase dates will occur on the last business day of April and October each year, with the first purchase to occur on the last business day of October 2000. The purchase price per share on each semi-annual purchase date will be equal to 85% of the fair market value per share on the start date of the offering period or, if lower, 85% of the fair market value per share on the semi-annual purchase date. A participant, however, may not purchase more than 2,000 shares on any purchase date, and not more than 200,000 shares may be purchased in total by all participants on any purchase date. Our compensation committee will have the authority to change these limitations for any subsequent offering period.

# Changes in Control

If the fair market value per share of our common stock on any purchase date is less than the fair market value per share on the start date of the 24-month offering period, then that offering period

will automatically terminate, and all participants in the terminated offering will be transferred to the new offering period commencing immediately thereafter.

Should we be acquired by merger or sale of substantially all of our assets or more than 50% of our voting securities, then all outstanding purchase rights will automatically be exercised immediately prior to the effective date of the acquisition. The purchase price will be equal to 85% of the market value per share on the start date of the offering period in which the acquisition occurs or, if lower, 85% of the fair market value per share immediately prior to the acquisition.

- The plan will terminate no later than the last business day of January 2010.
- The board may at any time amend, suspend or discontinue the Employee Stock Purchase Plan. Some amendments may require stockholder approval.

# TERMINATION OF EMPLOYMENT ARRANGEMENT AND CHANGE IN CONTROL ARRANGEMENTS

In May 1997, we entered into an agreement with Edward O. Lanphier II, our current President and Chief Executive Officer. Under the terms of the agreement, Mr. Lanphier will receive an annual salary, an optional bonus payment and common stock and stock options based on the achievement of some milestones. If Mr. Lanphier is terminated without cause, he will be entitled to his base salary for a period of twelve months plus customary benefits for that period. In the event of a change in control, the unvested portion of his options will vest.

On January 4, 1998, Mr. Lanphier received a loan from us in the principal amount of \$250,000. The loan bears interest at a rate of 6% per year and will be forgiven in forty-eight equal monthly installments of principal together with all accrued interest upon his completion of each month of employment with us over the forty-eight month period measured from the date the loan was made. If Mr. Lanphier is terminated without cause, the balance of the loan will be forgiven. A change of control will be deemed a termination without cause.

## LIMITATION OF LIABILITY AND INDEMNIFICATION

Our certificate of incorporation eliminates, to the maximum extent allowed by the Delaware General Corporation Law, directors' personal liability to us or our stockholders for monetary damages or breaches of fiduciary duties. The certificate of incorporation of Sangamo does not, however, eliminate or limit the personal liability of a director for the following:

- any breach of the director's duty of loyalty to us or our stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit.

Our bylaws provide that we shall indemnify our directors and executive officers to the fullest extent permitted under the Delaware General Corporation Law and may indemnify our other officers, employees and other agents as set forth in the Delaware General Corporation Law. In addition, we have entered into an indemnification agreement with each of our directors and executive officers. The indemnification agreements contain provisions that require us, among other things, to indemnify our directors and executive officers against liabilities (other than liabilities arising from intentional or knowing and culpable violations of law) that may arise by reason of their status or service as directors or executive officers of Sangamo or other entities to which they provide service at our request and to

advance expenses they may incur as a result of any proceeding against them as to which they could be indemnified. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified directors and officers.

Prior to the consummation of the offering, we will obtain additional insurance which covers directors and officers for claims they may otherwise be required to pay or for which we are required to indemnify them and which will become effective upon consummation of the offering.

At present, there is no pending litigation or proceeding involving any of our directors, officers, employees or agents where indemnification will be required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

#### RELATED PARTY TRANSACTIONS

Since October 23, 1995, we have issued shares of our preferred stock and warrants to purchase our preferred stock to investors in private placement transactions as follows: a total of 750,413 shares of Series A preferred stock at a price of \$1.00 per share, warrants to purchase 65,000 shares of Series A preferred stock at a price of \$1.00 and warrants to purchase 41,250 shares at a price of \$0.01 per share from October 1995 to June 1996; a total of 2,398,000 shares of Series B preferred stock at a price of \$3.00 per share and warrants to purchase 64,981 shares of Series B preferred stock at an exercise price of \$3.00 per share from November 1997 to February 1998; and a total of 2,000,000 shares of Series C preferred stock at a price of \$4.50 per share from August 1999 to January 2000. The following table summarizes the shares of preferred stock and warrants to purchase shares of preferred stock issued to our executive officers, directors and 5% stockholders and persons and entities associated with them in these private placement transactions. Shares and warrants held by affiliated persons and entities have been aggregated. See "Principal Stockholders." In connection with the above transactions, we entered into and agreement with the investors providing for registration rights with respect to these shares. See "Description of Capital Stock -- Registration Rights.'

	SERIES A PREFERRED STOCK	SERIES B PREFERRED STOCK	SERIES B PREFERRED STOCK WARRANTS	SERIES C PREFERRED STOCK
DIRECTORS John W. Larson	75,000	84,548	12,682	
William J. Rutter, Ph.D.				333,333
5% STOCKHOLDERS				
Entities affiliated with JAFCO Co., Ltd		1,000,000		222,223
Lombard Odier & Cie		1,000,000		222,222
Stephens-Sangamo BioSciences LLC				1,000,000

### AGREEMENTS WITH OFFICERS AND DIRECTORS

In May 1997, we entered into an agreement with Edward O. Lanphier II, our current President and Chief Executive Officer. Under the terms of the agreement, Mr. Lanphier will receive an annual salary, an optional bonus payment, and forgiveness of twenty-five percent of an outstanding loan, and common stock and stock options based on the achievement of some milestones.

On January 4 , 1998, Mr. Lanphier received a loan from us in the principal amount of \$250,000. The loan bears interest at a rate of 6% per year and will be forgiven in forty-eight equal monthly installments of principal, together with all accrued interest, upon his completion of each month of employment with us over the forty-eight month period measured from the date the loan was made. \$73,788 of the loan was forgiven in 1999. The loan is secured by 500,000 shares of our common stock. If Mr. Lanphier is terminated without cause, the balance of the loan will be forgiven. A change of control will be deemed a termination without cause.

Mr. Larson, a Director, is also a partner at Brobeck, Phleger & Harrison LLP, Sangamo's legal counsel.

On March 17, 2000 we entered into an agreement with Alan Wolffe, our current Senior Vice President and Chief Scientific Officer under which he will receive an annual base salary of \$250,000 and be eligible for an annual bonus plus a stock option covering 200,000 shares of our common stock and certain fringe benefits including payment of relocation expenses.

The agreement also provides that we will loan Dr. Wolffe up to \$400,000 to enable him to purchase up to 50,000 shares of our common stock under this option. The loan bears interest at seven 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 Dr. Wolffe \$250,000 as a housing allowance payable in four years from the date of the loan with interest at a rate of seven percent. Twenty-five percent of the loan and associated interest will be forgiven on each anniversary of the loan as long as Dr. Wolffe is a full time employee of Sangamo at such time. We also are going to employ Elizabeth Wolffe, Dr. Wolffe's wife, formerly a scientist at National Institutes of Health as a scientist.

We believe that all of the transactions set forth above were made on terms no less favorable to us than could have been otherwise obtained from unaffiliated third parties. All future transactions, including loans, if any, between us and our officers, directors and principal stockholders and their affiliates and any transactions between us and any entity with which our officers, directors or 5% stockholders are affiliated, will be approved by a majority of the board of directors, including a majority of the independent and disinterested outside directors of the board of directors and will be on terms no less favorable to us than could be obtained from unaffiliated third parties.

#### PRINCIPAL STOCKHOLDERS

The table below sets forth information regarding the beneficial ownership of our common stock as of February 29, 2000, and as adjusted for this offering, by:

- each person or entity who is known by us to own beneficially more than 5% of our outstanding stock;
- our Chief Executive Officer and our other executive officers whose total annual compensation exceeded \$100,000;
- each of our directors; and
- all directors and executive officers as a group.

Each stockholder's percentage ownership in the following table is based on 17,256,144 shares of common stock outstanding as of February 29, 2000. Unless otherwise indicated, the principal address of each of the stockholders below is c/o Sangamo BioSciences, Inc., 501 Canal Boulevard, Suite A100, Richmond, CA 94804. Except as otherwise indicated, and subject to applicable community property laws, except to the extent authority is shared by both spouses under applicable law, we believe the persons named in the table have sole voting and investment power with respect to all shares of common stock held by them.

	NUMBER OF SHARES BENEFICIALLY	PERCENTAGE OF SHARES BENEFICIALLY OWNED			
NAME AND ADDRESS OF BENEFICIAL OWNER	OWNED	PRIOR TO OFFERING			
Entities Affiliated with JAFCO Co., Ltd.(1) 1-8-2 Marunouchi, Chiyoda-ku Tokyo 100, Japan	2,444,446	14.2%	10.6%		
Lombard Odier & Cie	2,444,444	14.2	10.6		
Stephens-Sangamo BioSciences LLC	2,000,000	11.6	8.7		
Edward O. Lanphier II(2)	3,820,000	21.6	16.3		
Casey C. Case, Ph.D.(3)	210,000	1.2	*		
Peter Bluford(4)	260,000	1.5	*		
Herbert W. Boyer, Ph.D.(5)	100,000	*	*		
William G. Gerber, M.D.(6)	100,000	*	*		
John W. Larson(7)	474,460	2.7	2.1		
William J. Rutter, Ph.D.(8)	766,666	4.4	3.3		
Michael C. Wood(9)	1,460,000	8.4	6.3		
All directors and executive officers as a group (12 persons)(10)	7,591,126	41.0%	31.3%		

<sup>\*</sup> Less than one percent.

<sup>(1)</sup> Represents 844,446 shares held by JAFCO Co., Ltd; 246,574 shares held by JAFCO G-6(A) Investment Enterprise Partnership; 246,574 shares held by JAFCO G-6(B) Investment Enterprise Partnership; 334,246 shares held by JAFCO G-7(A) Investment Enterprise Partnership; 334,246 shares held by JAFCO G-7(B) Investment Enterprise Partnership; 164,388 shares held by JAFCO JS-3 Investment Enterprise Partnership; and 273,972 shares held by JAFCO R-3 Investment Enterprise Partnership.

- (2) Includes 400,000 shares of common stock issuable upon exercise of immediately exercisable options within 60 days of February 29, 2000. Also includes 400,000 shares held by Mr. Lanphier's minor children.
- (3) Includes 210,000 shares of common stock issuable upon exercise of immediately exercisable options within 60 days of February 29, 2000.
- (4) Includes 260,000 shares of common stock issuable upon exercise of immediately exercisable options within 60 days of February 29, 2000.
- (5) Includes 62,624 shares of common stock which are subject to repurchase.
- (6) Includes 64,583 shares of common stock which are subject to repurchase.
- (7) Includes 50,000 shares of common stock issuable upon exercise of immediately exercisable options within 60 days of February 29, 2000. Also includes warrants to purchase 25,364 shares of common stock.
- (8) Includes 100,000 shares of common stock which are subject to repurchase.
- (9) Includes 50,000 shares of common stock issuable upon exercise of immediately exercisable options within 60 days of February 29, 2000.
- (10) Includes 1,206,364 shares of common stock issuable upon exercise of immediately exercisable options within 60 days of February 29, 2000. Also includes 35,790 shares which are subject to repurchase.

#### DESCRIPTION OF CAPITAL STOCK

At the closing of this offering, we will be authorized to issue 80,000,000 shares of common stock, \$0.01 par value, and 5,000,000 shares of undesignated preferred stock, \$0.01 par value, following the conversion of our existing preferred stock. The following description of capital stock gives effect to the amended and restated certificate of incorporation to be filed prior to the closing of this offering. Immediately following the completion of this offering, and assuming no exercise of the underwriters' over-allotment option, a total of 22,300,147 shares of common stock will be issued and outstanding, and no shares of preferred stock will be issued and outstanding. As of January 31, 2000, there were 88 stockholders.

The following description of our capital stock is subject to and qualified by our amended and restated certificate of incorporation and bylaws, which are included as exhibits to the registration statement of which this prospectus forms a part, and by the provisions of the applicable Delaware law.

#### COMMON STOCK

The holders of our common stock are entitled to one vote per share on all matters to be voted upon by our stockholders. Subject to preferences that may apply to any outstanding preferred stock that we may issue, the holders of common stock are entitled to receive ratably those dividends, if any, as may be declared from time to time by the board of directors out of funds legally available for dividends. See "Dividend Policy." In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. Our common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock outstanding upon completion of this offering will be fully paid and nonassessable.

### PREFERRED STOCK

Our board of directors is authorized to issue, from time-to-time, without stockholder authorization, in one or more designated series, any or all of our authorized but unissued shares of preferred stock with any dividend, redemption, conversion and exchange provisions as may be provided in the particular series. Any series of preferred stock may possess voting, dividend, liquidation and redemption rights superior to those of the common stock.

The rights of the holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued in the future. Issuance of a new series of preferred stock, while providing desirable flexibility in connection with financing possible acquisitions and other corporate purposes, could have the effect of entrenching our board of directors and making it more difficult for a third-party to acquire, or discourage a third-party from acquiring, a majority of our outstanding voting stock. We have no present plans to issue any shares of or designate any series of preferred stock.

# WARRANTS

At December 31, 1999, there were warrants outstanding to purchase a total of 259,962 shares of our common stock, all of which will remain outstanding after the completion of this offering and have various expiration dates. Some of these warrants have net exercise provisions under which the holder may, in lieu of payment of the exercise price in cash, surrender the warrant and receive a net amount

of shares based on the fair market value of our common stock at the time of exercise of the warrant after deduction of the total exercise price.

#### REGISTRATION RIGHTS

Pursuant to the Amended and Restated Investors Rights Agreement dated January 20, 2000, some of our current stockholders and warrantholders have registration rights for 5,697,948 shares of common stock held by them, or issuable upon exercise of their warrants. Six months after the effective date of this offering, the stockholders may demand that we file a registration statement under the Securities Act covering all or a portion of the investors' registrable securities. The stockholders demanding a registration must hold at least 40% of the then outstanding registrable securities with an aggregate offering price, net of underwriting discounts and commissions, of at least \$7.5 million. These registration rights are subject to our right to delay the filing of a registration statement for a period not to exceed 120 days after receiving the registration demand, although we cannot delay more than once in a twelve-month period. In addition, the managing underwriter, if any, of the offering has the right to limit the number of the registrable securities proposed to be included in the registration. We are only obligated to effect one such demand registration. However, stockholders with registration rights may require us to file additional registration statements on Form S-3, subject to conditions and

These stockholders also have "piggyback" registration rights. Subject to exceptions, if we propose to register our securities under the Securities Act other than pursuant to the stockholders' demand registration rights noted above, the stockholders may require us to include all or a portion of their registrable securities in the registration. Again, the managing underwriter has the right to limit the number of the registrable securities proposed to be included in the registration.

We will bear all registration expenses incurred in connection with a registration effected pursuant to the rights described in the two foregoing paragraphs, though limited to two registrations on Form S-3. The expenses for all subsequent registrations on Form S-3 will be paid by the selling stockholders pro rata in proportion to the number of securities sold. In any registration, each selling stockholder will pay all underwriting discounts and selling commissions applicable to the sale of its registrable securities.

These registration rights terminate on the earlier of two years after the close of this offering or the date that all of its registrable securities may be sold during any 90-day period under Rule 144 of the Securities Act. The registration rights of each investor will also terminate when it owns less than 1% of our common stock.

ANTITAKEOVER EFFECTS OF PROVISIONS OF THE DELAWARE LAW AND FUTURE ISSUANCE OF PREFERRED STOCK

We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

- prior to that date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of our voting stock outstanding at

the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned by:

- (i) persons who are directors and also officers; and
- (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to 2000 Employee Stock Purchase Plan will be tendered in a tender or exchange offer; or
- on or subsequent to that date, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 defines "business combination" to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to some exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by any of these entities or persons.

Our amended and restated certificate of incorporation:

- provides that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not by written consent;
- provides that the authorized number of directors may be changed only by our board of directors; and
- authorizes our board of directors to issue blank check preferred stock to increase the amount of outstanding shares.

Our amended and restated by-laws provide that candidates for director may be nominated, and proposals for business to be considered by the stockholders at an annual meeting may be made, only by our board of directors or by a stockholder who gives us written notice no later than 90 days or no earlier than 120 days prior to the first anniversary of the date of the preceding year's annual meeting, subject to certain adjustments.

Delaware law and the foregoing provisions of our amended and restated certificate of incorporation and by-laws and the issuance of preferred stock in certain circumstances may have the effect of deterring hostile takeovers or delaying changes in control of our management, which could depress the market price of our common stock.

## TRANSFER AGENT AND REGISTRAR

Our transfer agent and registrar for our common stock is Equiserve L.P. Its telephone number is (781) 575-2469.

#### SHARES FLIGTBLE FOR FUTURE SALE

Prior to the offering, there has been no public market for our common stock. Future sales of substantial amounts of our common stock in the public market could reduce prevailing market prices. Furthermore, since no shares will be available for sale shortly after this offering because of contractual and legal restrictions on resale as described below, sales of substantial amounts of our common stock in the public market after these restrictions lapse could adversely affect the prevailing market price and our ability to raise equity capital in the future.

Upon completion of this offering, we will have outstanding an aggregate of 22,300,147 shares of common stock, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options or warrants issued after December 31, 1999. Of these shares, all of the shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, unless these shares are purchased by affiliates. The remaining 17,300,147 shares of common stock held by existing stockholders are restricted securities. Restricted securities may be sold in the public market only if registered for resale or if they qualify for an exemption from registration described below under Rules 144, 144(k) or 701 promulgated under the Securities Act.

Pursuant to the contractual restrictions described below and the provisions of Rules 144, 144(k) and 701, the restricted shares will be available for sale in the public market as follows:

- unless held by affiliates, the 5,000,000 shares sold in the public offering will be freely tradable upon completion of this offering;
- no shares will be eligible for sale beginning 90 days after the date of this prospectus;
- 14,255,790 shares will be eligible for sale upon the expiration of the lock-up agreements, described below, beginning 180 days after the date of this prospectus.

Lock-Up Agreements. All of our executive officers and directors, and stockholders holding an aggregate of at least 90% of the shares of our capital stock, have agreed under lock-up agreements that, without the prior written consent of Lehman Brothers Inc., they will not, directly or indirectly, offer, sell or otherwise dispose of any shares of common stock or any securities which may be converted into or exchanged for any such shares for the period ending 180 days after the date of this prospectus. Transfers or dispositions can be made sooner only with the prior written consent of Lehman Brothers Inc. See "Underwriting".

Rule 144. In general, under Rule 144 as currently in effect, beginning 90 days after the date of this prospectus a person or persons whose shares are aggregated, who has beneficially owned restricted securities for at least one year, including the holding period of any prior owner except an affiliate, would be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 223,001 shares immediately after the offering; or
- the average weekly trading volume of our common stock on the Nasdaq National Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales under Rule 144 are also subject to manner of sale provisions and notice requirements and to the availability of current public information about Sangamo.

Rule 144(k). Under Rule 144(k), a person who is not deemed to have been one of our affiliates at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, including the holding period of any prior owner except an

affiliate, is entitled to sell these shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144. 14,255,790 shares of our common stock will qualify as "144(k) shares" within 180 days after the date of this prospectus.

Rule 701. In general, under Rule 701 of the Securities Act as currently in effect, any of our employees, consultants or advisors, other than affiliates, who purchase or receive shares from us in connection with a compensatory stock purchase plan or option plan or other written agreement will be eligible to resell their shares beginning 90 days after the date of this prospectus, subject only to the manner of sale provisions of Rule 144, and by affiliates under Rule 144 without compliance with its holding period requirements.

Registration Rights. Upon completion of this offering, the holders of 15,035,896 shares of our common stock, or their transferees, will be entitled to rights with respect to the registration of their shares for resale under the Securities Act. Registration of their shares for resale under the Securities Act would result in these shares becoming freely tradable without restriction under the Securities Act, except for shares purchased by affiliates, immediately upon the effectiveness of that registration statement.

Stock Options. Following the offerings, we intend to file a registration statement on Form S-8 under the Securities Act covering the shares of common stock reserved for issuance under our 1995 Stock Option Plan, 2000 Stock Incentive Plan and 2000 Employee Stock Purchase Plan that will become effective upon filing. Accordingly, shares registered under that registration statement will, subject to Rule 144 volume limitations applicable to affiliates, be available for sale in the open market after the filing, except those shares subject to lockup agreements and unvested shares.

#### UNDERWRITING

Under the underwriting agreement, which is filed as an exhibit to the registration statement relating to this prospectus, the underwriters named below, for whom Lehman Brothers Inc., Chase Securities Inc., ING Barings LLC, William Blair & Company, L.L.C. and Fidelity Capital Markets, a division of National Financial Services Corporation, are acting as representatives, have each agreed to purchase from us the respective number of shares of common stock shown opposite its name below:

UNDERWRITER	NUMBER OF SHARES
Lehman Brothers Inc	
Total	5,000,000

The underwriting agreement provides that the underwriters' obligations to purchase shares of common stock depend on the satisfaction of the conditions contained in the underwriting agreement. It also provides that, if any of the shares of common stock are purchased by the underwriters under the underwriting agreement, all of the shares of common stock that the underwriters have agreed to purchase under the underwriting agreement, must be purchased. The conditions contained in the underwriting agreement include the requirement that:

- the representations and warranties made by us to the underwriters are true;
- that there is no material change in the financial markets; and
- we deliver to the underwriters customary closing documents.

The representatives have advised us that the underwriters propose to offer the shares of common stock directly to the public at the public offering price set forth on the cover page of this prospectus, and to dealers, who may include the underwriters, at this public offering price less a selling concession not in excess of \$ per share. The underwriters may allow, and the dealers may reallow, a concession not in excess of \$ per share to brokers and dealers. After completion of the offering, the underwriters may change the offering price and other selling terms.

We have granted the underwriters an option to purchase up to 750,000 additional shares of common stock, exercisable solely to cover over-allotments, if any, at the public offering price less the underwriting discount shown on the cover page of this prospectus. The underwriters may exercise this option at any time until 30 days after the date of the underwriting agreement. If this option is exercised, each underwriter will be committed, so long as the conditions of the underwriting agreement are satisfied, to purchase a number of additional shares of common stock proportionate to the underwriter's initial commitment as indicated in the table above, and we will be obligated, under the over-allotment option, to sell the shares of common stock to the underwriters.

We have agreed not to, without the prior consent of Lehman Brothers Inc., directly or indirectly, offer, sell or otherwise dispose of any shares of common stock or any securities which may be

converted into or exchanged for any such shares of common stock for a period of 180 days from the date of this prospectus. All of our executive officers and directors, and some of our stockholders holding an aggregate of at least 90% of the shares of our capital stock, have agreed under lock-up agreements that, without the prior written consent of Lehman Brothers Inc., they will not, directly or indirectly, offer, sell or otherwise dispose of any shares of common stock or any securities which may be converted into or exchanged for any such shares for the period ending 180 days after the date of this prospectus. See "Shares Eligible for Future Sale."

The underwriting discount is equal to the public offering price per share of common stock less the amount paid by the Underwriters to us per share of common stock. The underwriting discount is expected to be approximately 7% of the public offering price. We have agreed to pay the underwriters the following total amount, assuming either no exercise or full exercise by the underwriters of their over-allotment option:

	TOTAL FEES		
	FEE PER SHARE	WITHOUT EXERCISE OF OVER-ALLOTMENT OPTION	WITH FULL EXERCISE OF OVER-ALLOTMENT OPTIONS
Underwriting discount paid by Sangamo	\$	\$	\$

In addition, we estimate that our share of the total expenses of this offering, excluding the underwriting discount, will be approximately \$1.2\$ million.

Before this offering, there has been no public market for the shares of common stock. The initial public offering price will be negotiated between the representatives and us. In determining the initial public offering price of the common stock, the representatives will consider, among other things and in addition to prevailing market conditions:

- our historical performance and capital structure;
- estimates of our business potential and earning prospects;
- an overall assessment of our management; and
- the consideration of the above factors in relation to market valuations of companies in related businesses.

Our common stock has been approved for quotation on the Nasdaq National Market under the symbol "SGMO."  $\,$ 

We have agreed to indemnify the underwriters against liabilities, including liabilities under the Securities Act and liabilities arising from breaches of the representations and warranties contained in the underwriting agreement, and to contribute to payments that the underwriters may be required to make for these liabilities.

Until the distribution of the common stock is completed, rules of the Securities and Exchange Commission may limit the ability of the underwriters and selling group members to bid for and purchase shares of common stock. As an exception to these rules, the representatives are permitted to engage in transactions that stabilize the price of the common stock. These transactions may consist of bids or purchases for the purposes of pegging, fixing or maintaining the price of the common stock.

The underwriters may create a short position in the common stock in connection with the offering, which means that they may sell more shares than are set forth on the cover page of this prospectus. If the underwriters create a short position, then the representatives may reduce that short position by purchasing common stock in the open market. The representatives also may elect to reduce any short position by exercising all or part of the over-allotment option. The underwriters have

informed us that they do not intend to confirm sales to discretionary accounts that exceed 5% of the total number of shares of common stock offered by them.

The representatives also may impose a penalty bid on underwriters and selling group members. This means that, if the representatives purchase shares of common stock in the open market to reduce the underwriters' short position or to stabilize the price of the common stock, they may reclaim the amount of the selling concession from the underwriters and selling group members who sold those shares as part of the offering.

In general, purchases of a security for the purpose of stabilization or to reduce a syndicate short position could cause the price of the security to be higher than it might otherwise be in the absence of these purchases. The imposition of a penalty bid might have an effect on the price of a security to the extent that it may discourage resales of the security by purchasers in an offering.

Neither we nor any of the underwriters makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the common stock. In addition, neither we nor any of the underwriters makes any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Any offers in Canada will be made only under an exemption from the requirements to file a prospectus in the relevant province of Canada in which the sale is made.

Purchasers of the shares of common stock offered in this prospectus may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover of this prospectus.

Fidelity Capital Markets, a division of National Financial Services Corporation, is acting as a selling group member in this offering and will be facilitating electronic distribution of information through the Internet, intranet and other proprietary electronic technology.

At our request, the underwriters have reserved up to 300,000 shares of the common stock offered by this prospectus for sale to our officers, directors, employees and their family members and to our business associates at the initial public offering price set forth on the cover page of this prospectus. These persons must commit to purchase no later than the close of business on the day following the date of this prospectus. The number of shares available for sale to the general public will be reduced to the extent these persons purchase the reserved shares.

Lehman Brothers Inc. and one of its affiliates are stockholders of Sangamo. Together they own an aggregate of less than one percent of the issued and outstanding shares of our common stock. In addition, we have entered into a consulting agreement with an affiliate of Lehman Brothers Inc. that provides for annual payments to the affiliate of \$20,000.

#### LEGAL MATTERS

The validity of the common stock offered will be passed upon for us by Brobeck, Phleger & Harrison LLP, San Francisco, California. John W. Larson, one of our directors, is a senior partner of Brobeck, Phleger & Harrison LLP and beneficially owns an aggregate of 474,460 shares of our common stock. Latham & Watkins is acting as counsel for the underwriters in connection with selected legal matters relating to the shares of common stock offered by this prospectus.

#### **EXPERTS**

Ernst & Young LLP, independent auditors, have audited our financial statements at December 31, 1998 and 1999, and for each of the three years in the period ended December 31, 1999, as set forth in their report. We have included our financial statements in this prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on the authority of such firm as experts in accounting and auditing.

The statements in this prospectus in the sections entitled "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" and "Business -- Intellectual Property and Technology Licenses" have been passed upon, as to patent matters, by Townsend and Townsend and Crew LLP, patent counsel to us, and experts on such matters, and are included in this prospectus in reliance upon its review and approval.

#### WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the Securities and Exchange Commission, Washington, D.C. 20549, under the Securities Act a registration statement on Form S-1 relating to the common stock offered by this prospectus. This prospectus does not contain all of the information set forth in the registration statement and its exhibits and schedules. For further information with respect to us and the shares we are offering by this prospectus, you should refer to the registration statement and its exhibits and schedules. Statements contained in this prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete, and you should refer to the copy of that contract or other document filed as an exhibit to the registration statement. You may read or obtain a copy of the registration statement, including exhibits, at the commission's public reference room at 450 Fifth Street, N.W., Washington, D.C. 20549. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. You may obtain information on the operation of the public reference room by calling the commission at 1-800-SEC-0330. The commission maintains a Web site that contains reports, proxy information statements and other information regarding registrants that file electronically with the commission. The address of this Web site is http://www.sec.gov.

As a result of the offering, the information and reporting requirements of the Securities Exchange Act of 1934 will apply to us. We intend to furnish holders of our common stock with annual reports containing, among other information, audited financial statements certified by an independent public accounting firm and quarterly reports containing unaudited condensed financial information for the first three quarters of each fiscal year. We intend to furnish other reports as we may determine or as may be required by law.

# INDEX TO FINANCIAL STATEMENTS

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#### 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, 1998 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, 1999. 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, 1998 and 1999, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 1999, in conformity with accounting principles generally accepted in the United States.

Ernst & Young LLP

Palo Alto, California January 28, 2000, except for Note 7, as to which the date is March 28, 2000.

# BALANCE SHEETS (IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

	DECEMB		PRO FORMA STOCKHOLDERS' EQUITY DECEMBER 31,
	1998	1999	1999
			(UNAUDITED)
ASSETS Current assets: Cash and cash equivalents. Short-term investments. Accounts receivable. Prepaid expenses.	\$ 1,250 1,808 384 97	\$ 251 7,252 562 171	
Total current assets  Property and equipment, net  Other assets	3,539 436 57	8,236 612 314	
Total assets	\$ 4,032 ======	\$ 9,162 ======	
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities:    Accounts payable and accrued liabilities Accrued compensation and employee benefits Deferred revenue	196 	\$ 348 182 500	
Total current liabilities	378 250	1,030 250	
3,148,000 and 4,855,917 shares issued and outstanding at December 31, 1998 and 1999, respectively (none pro forma); aggregate liquidation preference of \$15,485 at December 31, 1999, at amount paid in	7,743	15,187	\$
amount paid in	1,576 (187) (773) (5,010) 55	3,258 (125) (1,736) (8,785) 83	18,445 (125) (1,736) (8,785) 83
Total stockholders' equity	3,404	7,882	\$ 7,882
Total liabilities and stockholders' equity	\$ 4,032 ======	\$ 9,162 ======	=====

See accompanying notes.

# STATEMENTS OF OPERATIONS (IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

	YEAR ENDED DECEMBER 31,		
		1998	
Revenues: Federal government research grants Collaboration agreements		\$ 1,888 150	\$ 1,182 1,000
Total revenues			2,182
and 1999, respectively)	1,700	4,259	4,266
and 1999, respectively)	797	1,237	1,822
Total operating expenses		5,496	
Loss from operations	(1,345) 44 (99)	(3,458) 185 (12)	(3,906) 148 (17)
Net loss  Deemed dividend upon issuance of convertible preferred stock		(3,285)	(3,775) (4,500)
Net loss attributable to common stockholders	,	\$(3,285)	. , ,
Basic and diluted net loss per common share	\$ (0.26)	====== \$ (0.56) ======	\$ (1.38)
Shares used in computing basic and diluted net loss per common share	5,485		5,991
Pro forma basic and diluted net loss per common share (unaudited)			\$ (0.63) ======
Shares used in computing pro forma basic and diluted net loss per common share (unaudited)			13,102 ======

See accompanying notes.

# STATEMENT OF STOCKHOLDERS' EQUITY (IN THOUSANDS, EXCEPT SHARE AND PER SHARE AMOUNTS)

	CONVER PREFE STO	RRED CK		COMMON STOCK				RECEIVABLE DEFERRED		ACCUMULATED
	SHARES	AMO		SHARES	AMOUNT	STOCKHOLDER	COMPENSATION	DEFICIT		
Balances at December 31, 1996  Issuance of common stock for services	750,000	\$	750	5,472,500	\$ 9	\$	\$	\$ (325)		
rendered at \$0.01 per share  Issuance of common stock upon exercise of options at \$0.05 per				303,800	331					
share  Issuance of Series B convertible preferred stock for cash at \$3.00 per share, net of				100,000	5					
issuance costs of \$180Issuance of Series B preferred stock	2,358,000	6	, 894							
warrants			99							
Deferred stock compensation Amortization of deferred stock					449		(449)			
compensation							46	(4 400)		
Net loss and comprehensive loss								(1,400)		
Balances at December 31, 1997 Issuance of common stock upon exercise of options at \$0.01 and \$0.05 per share, net	3,108,000	7	, 743	5,876,300	794		(403)	(1,725)		
of repurchases				54,718	2					
of preferred stock at \$0.01 per share	40,000									
Issuance of note receivable to stockholder Forgiveness of note receivable to						(250)				
stockholder						63				
Deferred stock compensation Amortization of deferred stock					780		(780)			
compensation							410			
Unrealized gain on investments Net loss								(2.205)		
Comprehensive loss								(3,285)		
Balances at December 31, 1998Issuance of common stock upon exercise of	3,148,000	7	, 743	5,931,018	1,576	(187)	(773)	(5,010)		
options at \$0.01 to \$0.15 per share  Issuance of common stock and options to purchase common stock for services				191,042	12					
rendered  Issuance of Series A convertible preferred stock upon exercise of warrants at \$0.01				10,000	188					
per share  Issuance of Series C convertible preferred stock for cash at \$4.50 per share, net of	41,250									
issuance costs of \$56 Forgiveness of note receivable to	1,666,667	7	, 444							
stockholder						62				
Deferred stock compensation Amortization of deferred stock					1,482		(1,482)			
compensationUnrealized gain on investments							519 			
Net loss								(3,775)		
Comprehensive loss										
Delenges of December 21, 1999	4 055 017		107	6 100 000	#2 2FC	 ¢(10E)	 Ф(1 726)	Φ(0.70E)		
Balances at December 31, 1999	4,855,917 ======		, 187 ====	6,132,060 ======	\$3,258 =====	\$(125) ====	\$(1,736) ======	\$(8,785) =====		

	ACCUMULATED OTHER COMPREHENSIVE INCOME	
Balances at December 31, 1996	\$	\$ 434
rendered at \$0.01 per share  Issuance of common stock upon exercise of options at \$0.05 per		331
share  Issuance of Series B convertible preferred stock for cash at \$3.00 per share, net of		5
issuance costs of \$180 Issuance of Series B preferred stock		6,894
warrants		99
Deferred stock compensation  Amortization of deferred stock		
compensation		46
Net loss and comprehensive loss		(1,400)

Balances at December 31, 1997		6,409
options at \$0.01 and \$0.05 per share, net of repurchases		2
Issuance of Series B convertible preferred stock for services related to the issuance		
of preferred stock at \$0.01 per share  Issuance of note receivable to stockholder		(250)
Forgiveness of note receivable to stockholder		63
Deferred stock compensationAmortization of deferred stock		
compensation		410
Unrealized gain on investments	55	55
Net loss		(3, 285)
Comprehensive loss		(3,230)
Balances at December 31, 1998	55	3,404
Issuance of common stock upon exercise of	33	3,404
options at \$0.01 to \$0.15 per share		12
Issuance of common stock and options to purchase common stock for services		
rendered		188
Issuance of Series A convertible preferred stock upon exercise of warrants at \$0.01		
per share		
Issuance of Series C convertible preferred stock for cash at \$4.50 per share, net of		
issuance costs of \$56		7,444
Forgiveness of note receivable to		
stockholder		62
Deferred stock compensation		
Amortization of deferred stock		
compensation		519
Unrealized gain on investments	28	28
Net loss		(3,775)
Comprehensive loss		(3,747)
Combi cucustas 1022		(3,141)
Balances at December 31, 1999	\$83	\$ 7,882
Data de December Off Tool International	===	======

See accompanying notes.

# STATEMENTS OF CASH FLOWS INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS (IN THOUSANDS)

	YEAR ENDED DECEMBER 31,		
		1998	1999
OPERATING ACTIVITIES:			
Net loss	\$(1,400)	\$(3,285)	\$(3,775)
Depreciation and amortization	2	86	164
Amortization of deferred stock compensation  Issuance of common stock and options to purchase	46	410	519
common stock for technology and services rendered	331		188
Non-cash interest expense	99		
Accounts receivable	(226)	20	(178)
Prepaid expenses and other assets	(53)	(284)	(14)
Accounts payable and accrued liabilities  Accrued compensation and employee benefits	383	(305) 196	166 (14)
Deferred revenue			500
Net cash used in operating activitiesINVESTING ACTIVITIES:	(818)	(3,162)	(2,444)
Purchases of short-term investments		(2,921)	(8,242)
investments		1,166	2,571
Purchases of property and equipment		(400)	(340)
Net cash used in investing activitiesFINANCING ACTIVITIES:	(124)	(2,155)	(6,011)
Proceeds from issuance of convertible preferred stock	5,934		7,444
Proceeds from issuance of common stock	, 5	3	12
Borrowings under note payable		250	
Proceeds from issuance of convertible promissory notes	960		
Net cash provided by financing activities	6,899	253	7,456
Net increase in cash and cash equivalents	5,957	(5,064)	(999)
Cash and cash equivalents, beginning of period	357	6,314	1,250
Cash and cash equivalents, end of period	\$ 6,314 ======	\$ 1,250 ======	\$ 251 ======
SUPPLEMENTAL DISCLOSURES:			
Cash paid for interest	\$ ======	\$ 12 ======	\$ 17 ======
NONCASH INVESTING AND FINANCING ACTIVITIES:			
Deferred compensation related to stock options	\$ 449 ======	\$ 780 =====	\$ 1,482 ======
Conversion of convertible promissory notes to convertible		•	•
preferred stock	\$ 960 =====	\$ ======	\$ ======
Deemed dividend upon issuance of convertible preferred	Ф	¢.	ф 4 FOO
stock	\$ ======	\$ ======	\$ 4,500 =====

See accompanying notes.

#### 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"). Through December 31, 1998, Sangamo was considered to be in the development stage. During 1999, Sangamo entered into several Universal GeneTools collaborations and recognized revenues associated with these agreements, and expects to continue to receive revenues under these, similar and other agreements in the future. Consequently, Sangamo is no longer considered to be in the development stage. 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 (see Note 7), and from the issuance of equity or debt securities. To date, Sangamo has been awarded research grants from the National Institute of Standards and Technology and the National Institutes of Health amounting to approximately \$5,600,000 of which approximately \$5,000,000 has been used from inception of the Company through December 31, 1999. Sangamo believes that its available cash, cash equivalents and short-term investments of \$7,503,000 as of December 31, 1999, along with expected federal government research grant reimbursements and revenues from Universal GeneTools collaborations and strategic partnerships, will be adequate to fund its operations through at least fiscal 2000. Sangamo will need to raise substantial additional capital to fund subsequent operations. Sangamo intends to seek funding through the issuance of equity securities, including this offering, through additional Universal GeneTools collaborations, strategic partnerships, and federal government research grants. Sangamo may seek to raise additional capital when conditions permit. We cannot assure you that funding will be available on favorable terms, if at all.

#### INITIAL PUBLIC OFFERING

In February 2000, the Board of Directors authorized the management of Sangamo to file a registration statement with the Securities and Exchange Commission permitting Sangamo to sell shares of its common stock to the public. If the initial public offering is closed under the terms presently anticipated, all of the convertible preferred stock outstanding will automatically convert into common stock (see Note 7). Unaudited pro forma stockholders' equity, as adjusted for the assumed conversion of the preferred stock, is set forth on the balance sheet.

## 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.

# 1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED) 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 two financial institutions. Cash equivalents of \$1,236,000 and \$249,000 at December 31, 1998 and December 31, 1999, respectively, consist of a certificate of deposit and deposits in a money market investment account.

#### SHORT-TERM INVESTMENTS

Sangamo classifies its short-term investments 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. Through December 31, 1999, Sangamo has experienced no losses on its short-term investments.

At December 31, 1998 short-term investments consisted of US Treasury bills and commercial notes with an amortized cost of \$1,753,000 and a fair value of \$1,808,000. These investments matured during 1999. At December 31, 1999, short-term investments consisted of commercial notes and a certificate of deposit with an unamortized cost of \$7,169,000 and fair value of \$7,252,000 that mature at various dates through May 2000.

#### 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

In 1998, Sangamo adopted SFAS No. 130, "Reporting Comprehensive Income," which established new rules for the reporting and display of comprehensive income and its components. Comprehensive income 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 as earned when ZFPs are delivered to the Universal GeneTools collaborators. Generally, Sangamo receives up-front payments from these collaborations prior to the delivery of ZFPs and the revenues from these payments are

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED) deferred until the ZFPs are delivered. The risk of ownership has passed to the collaborator and all performance obligations have been satisfied at the time revenue is recognized.

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 remeasured as they vest over a performance period. The fair value of such options is determined using the Black-Scholes model.

## INCOME TAXES

Sangamo uses the liability method to account 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 shares subject to repurchase, and excludes any dilutive effects of options, warrants, and convertible securities. Potential dilutive securities have also been excluded from the computation of diluted net loss per share as their inclusion would be antidilutive.

Pro forma net loss per share has been computed as described above and also gives effect, under Securities and Exchange Commission guidance, to the conversion of preferred shares not included

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED) above that will automatically convert to common shares upon completion of the Company's initial public offering, using the if-converted method.

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

	YEAR ENDED DECEMBER 31,		
		1998	
Historical: Net loss attributable to common stockholders	\$(1,400) ======		
Basic and diluted: Weighted-average shares of common stock outstanding Less: weighted-average shares subject to repurchase		5,919 (76)	
Shares used in computing basic and diluted net loss per common share	5,485	5,843 ======	5,991
Basic and diluted net loss per common share		\$ (0.56)	\$ (1.38)
Pro forma: Net loss			\$(8,275) ======
Weighted-average shares of common stock outstanding (from above)			5,991
the date of issuance (unaudited)			7,111
Shares used in computing pro forma basic and diluted net loss per common share (unaudited)			13,102
Pro forma basic and diluted net loss per common share (unaudited)			\$ (0.63) ======

If Sangamo had reported net income, the calculation of historical and pro forma diluted earnings per share would have included approximately an additional 122,915, 284,994 and 927,652 common equivalent shares related to outstanding stock options and warrants not included above (determined using the treasury stock method) for 1997, 1998 and 1999, respectively.

#### SEGMENT REPORTING

As of January 1, 1998, Sangamo adopted SFAS No. 131, "Disclosure about Segments of an Enterprise and Related Information." SFAS 131 establishes annual and interim reporting standards for an enterprise's operating segments and related disclosures about its products, services, geographic areas, and major customers. Sangamo has determined that it operates in only one segment. Accordingly, the adoption of this statement had no impact on its financial statements.

# ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED) MAJOR CUSTOMERS

During 1999, Sangamo entered into Universal GeneTools agreements with 13 pharmaceutical and biotechnology companies and earned revenue of \$1,000,000 under seven of these agreements. At December 31, 1999, Sangamo's accounts receivable consisted of amounts due from two 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.

#### 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 will be effective for fiscal 2001. SFAS 133 establishes accounting and reporting standards requiring that 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.

In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" ("SAB 101"). SAB 101 summarizes the SEC's views in applying generally accepted accounting principles to revenue recognition, and specifically addresses revenue recognition for upfront, non-refundable fees earned in connection with research collaboration arrangements. It is the SEC's position that such fees should generally be recognized over the term of the agreement. Sangamo expects to apply this accounting to its future collaborations. Adoption of SAB 101 will not impact on the Company's historical revenue recognition policy.

#### 2. PROPERTY AND EQUIPMENT

Property and equipment consist of the following:

	DECEME	BER 31,
	1998	1999
	(IN THO	OUSANDS)
Laboratory equipment	\$137 209 178	\$ 436 227 201
Less accumulated depreciation and amortization	524 (88)	864 (252)
	\$436 ====	\$ 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 1997, 1998 and 1999 was \$74,000, \$314,000, and \$336,000, respectively. Future minimum payments under non-cancelable operating leases at December 31, 1999 consist of the following:

	AMOUNT	
	(IN THOUSANDS)	
2000. 2001. 2002. 2003. 2004.	304	
	\$1,428 =====	

In May 1998, Sangamo entered into a Loan and Security Agreement with a financial institution that provides for notes payable totaling up to \$500,000 for purchases of equipment. Outstanding notes payable bear interest at 6.5% per annum and interest payments are due monthly. The outstanding balance at December 31, 1998 and 1999 was \$250,000. Principal under the notes are due on May 2003. Included in other assets in the accompanying balance sheets is \$250,000 pledged in the form of a certificate of deposit used to collateralize the notes payable.

#### 4. STOCKHOLDERS' EQUITY

#### CONVERTIBLE PREFERRED STOCK

Convertible preferred stock consists of the following, by series:

		SHARES ISSUED AND OUTSTANDING DECEMBER 31,		
	DESIGNATED	1998	1999	
Series A B C	856,250 2,462,981 2,000,000 5,319,231	750,000 2,398,000  3,148,000	791,250 2,398,000 1,666,667  4,855,917	

The holders of Series A, B and C convertible preferred stock are entitled to receive noncumulative dividends at the rate of 8% per share per year, if declared, prior to and in preference to the payment of dividends to holders of common stock. As of December 31, 1999, no dividends had been declared. Holders of Series A, B and C convertible preferred stock are entitled to a liquidation preference equal to \$1.00, \$3.00 and \$4.50 per share, respectively, plus all declared but unpaid dividends. In a liquidation, any assets remaining following the payment of these amounts would be distributed to common stockholders.

Convertible preferred stock is convertible into common stock at the option of the holder, initially at an exchange ratio of one-to-one (see Note 7). Convertible preferred shares are automatically

#### 4. STOCKHOLDERS' EQUITY (CONTINUED)

converted into common stock immediately upon the closing of an underwritten public offering that is at a price to the public of at least \$6.00 per share and that results in aggregate proceeds to Sangamo of at least \$7,500,000. All convertible preferred shares have voting rights equal to common stock on an as-if-converted basis.

In November 1999, Sangamo sold 1,000,000 shares of its Series C convertible preferred stock to an investor for net proceeds of \$4,500,000. 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 by \$6.00 per share. Accordingly, the incremental fair value, limited to the amount of the proceeds received of \$4,500,000, 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.

#### COMMON STOCK

At December 31, 1999, 45,500 shares of outstanding common stock were subject to the Company's contractual right of repurchase at a weighted average price of \$0.05 which rights generally lapse over periods not exceeding four years.

In 1997, the Company sold a total of 303,800 shares to a consultant and an officer for services rendered at \$0.01 per share, which was below the fair value of the Company's stock on the date of grant. As a result, the Company recognized a charge of \$331,000.

#### WARRANTS

At December 31, 1999, warrants to purchase 65,000 shares of Series A convertible preferred stock were outstanding at an exercise price of \$1.00 per share, which are exercisable through September 2000, and warrants to purchase 64,981 shares of Series B convertible preferred stock were outstanding at an exercise price of \$3.00 per share, which are exercisable through August 2002. The warrants to purchase Series B preferred stock were issued in connection with a 1997 bridge loan transaction. Such warrants were assigned a value of \$99,000 using the Black Scholes method which was charged to interest expense in 1997. The valuation was determined using the following assumptions: risk free interest rate -- 6%; term -- 5 years, dividend yield -- 0%; and volatility of the Company's stock -- .5. Sangamo has reserved both preferred and common stock for issuance upon exercise of the warrants.

#### STOCK OPTION PLAN

Sangamo's 1995 Stock Option Plan (the "1995 Option Plan") provides for the issuance of common stock and grants of options for common stock to employees, officers, directors and consultants. The exercise price per share will be no less than 85% 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% stockholder, then the exercise price per share will not be less than 110% of the fair value per share of common stock on the option grant date, and the option term

## 4. STOCKHOLDERS' EQUITY (CONTINUED)

will not exceed five years. Options granted under the 1995 Option Plan generally vest over four years at a rate of 25% 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 1995 Option Plan may be exercised prior to vesting, with the related shares subject to Sangamo's right to repurchase the shares 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 3,700,000 shares were reserved for issuance pursuant to the 1995 Option Plan. 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, 1996 Options granted Options exercised Options canceled	785,500 (816,000)  125,000	392,000 816,000 (100,000) (125,000)	\$0.04 \$0.08 \$0.05 \$0.04
Balance at December 31, 1997	94,500 1,200,000 (828,000) 	983,000  828,000 (101,750)  (35,250)	\$0.08  \$0.16 \$0.03 \$0.01 \$0.08
Balance at December 31, 1998	548,782 1,000,000	1,674,000	\$0.08  \$0.12 
Options granted Options exercised Options canceled	(459,500)  69,792	459,500 (191,042) (69,792)	\$0.22 \$0.06 \$0.10
Balance at December 31, 1999	1,159,074 ======	1,872,666	\$0.15 =====

Options outstanding at December 31, 1999 have a weighted average remaining contractual life of 7.4 years and may be immediately exercised; however, 1,061,472 shares issued pursuant to these options would be subject to Sangamo's right of repurchase. Vested options at December 31, 1999 total 811,194 and have a weighted average remaining contractual life of 6.3 years. The weighted-average fair value per share of options granted during 1997, 1998 and 1999 was \$0.44, \$1.08 and \$5.06, respectively. All such options were granted with exercise prices below the fair value of the Company's common stock at the date of grant, as determined in accordance with the procedure described below.

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 1997, 1998 and 1999, 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,

# 4. STOCKHOLDERS' EQUITY (CONTINUED)

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 \$449,000, \$780,000 and \$1,482,000, in 1997, 1998 and 1999, respectively, which is being amortized to expense over the vesting term of the option.

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 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 EI	NDED DECEMBI	ER 31,
	1997	1998	1999
Pro forma net loss (in thousands)	\$(1,404) ======	\$(3,296) =====	\$(3,789) ======
Pro forma basic and diluted net loss per share	\$ (0.26) =====	\$ (0.56) =====	\$ (0.63) =====

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 1997, 1998 and 1999 were estimated at the date of grant using the minimum value method with the following weighted-average assumptions:

	YEAR E	NDED DECEMB	ER 31,
	1997	1998	1999
Risk-free interest rate	5.8%	5.0%	6.0%
Expected life of option	5 yrs	5 yrs	5 yrs
Expected dividend yield of stock	0%	0%	0%

In 1998 and 1999, respectively, Sangamo granted 80,000 and 154,000, nonqualified common stock options to consultants at exercise prices that range from \$0.15 to \$0.23 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% one year from the grant date and one thirty-sixth per month thereafter and expire ten years after the grant date. Expense of \$128,000 was recognized in 1999 related to these transactions. 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%; term -- 10 years; dividend yield -- 0%; and expected volatility of the Company's common stock -- .6.

#### 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% per annum and is being forgiven one forty-eighth each month beginning January 1, 1998. As of December 31, 1998 and 1999, \$187,000 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 on 500,000 shares of common stock owned by the Officer.

#### 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:

	DECEMB	ER 31,
	1998	1999
	(IN THO	USANDS)
Deferred tax assets:  Net operating loss carryforwards  Research and development credit carryforwards  Other reserves and accruals	\$ 1,600  	\$ 2,500 100 100
Valuation allowance		2,700 (2,700)
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. The valuation allowance increased by \$1,100,000 each in 1998 and 1999. As of December 31, 1999, Sangamo had net operating loss carryforwards for federal and state income tax purposes of approximately \$7,900,000. Sangamo also had federal research and development credit carryforwards of approximately \$100,000. The net operating loss and credit carryforwards will expire at various dates beginning in 2010 through 2019, 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.

## 7. SUBSEQUENT EVENTS

## CONVERTIBLE PREFERRED STOCK SALE

In January 2000, Sangamo sold 333,333 shares of its Series C convertible preferred stock to a member of its Board of Directors for net proceeds of approximately \$1,500,000. 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 \$1,500,000, 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, 2000.

# 7. SUBSEQUENT EVENTS (CONTINUED) GRANT OF STOCK OPTIONS

During January through March 2000, Sangamo granted to directors and employees options to purchase a total of 650,000 shares of common stock at an exercise prices ranging from \$0.625 to \$8.00 per share. Sangamo will record additional deferred stock compensation of \$5,790,000 with regard to these grants.

#### STRATEGIC PARTNERSHIP

In January 2000, Sangamo announced that it had entered into a strategic partner agreement with Edwards LifeScience, Inc., formerly the CardioVascular Group of Baxter Healthcare Corporation for the development of ZFPs in cardiovascular and peripheral vascular diseases. Under this agreement, Baxter has purchased a \$5,000,000 convertible note which will convert into common stock upon consummation of this offering, and Sangamo has received \$1,000,000 in initial research funding from Baxter which was recorded as deferred revenue and will be recognized as revenue as related research services are performed. In March 2000, Baxter purchased a \$7,500,000 convertible note upon exercise of an option 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 will convert into common stock upon consummation of this offering. In the future, Sangamo may receive option fees, milestone payments, royalties and additional research funding from this agreement.

#### EMPLOYEE STOCK PURCHASE PLAN

The Board of Directors adopted the 2000 Employee Stock Purchase Plan in February 2000, pending stockholder approval, to be effective upon the completion of Sangamo's initial public offering of its common stock. Sangamo has reserved a total of 400,000 shares of common stock for issuance under the plan. Eligible employees may purchase common stock at 85% 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.

#### STOCK INCENTIVE PLAN

In February 2000, the Board of Directors adopted the 2000 Stock Incentive Plan (the "2000 Plan") and reserved 2,000,000 shares for future grant thereunder, which shares include any shares remaining for future grant under the 1995 Option Plan. The terms of the 2000 Plan are substantially similar to the 1995 Option Plan. The 2000 Plan also provides for automatic grants to non-employee directors.

#### 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 will be filed following the effectiveness of the registration statement relating to the public offering.

7. SUBSEQUENT EVENTS (CONTINUED)
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 automatically amended to two-to-one in accordance with the Company's articles of incorporation. All common share and options and per share amounts in the accompanying financial statements have been adjusted retroactively to reflect the stock split.

5,000,000 Shares

[SANGAMO LOGO]

SANGAMO BIOSCIENCES, INC.

Common Stock

PROSPECTUS , 2000

LEHMAN BROTHERS CHASE H&Q
ING BARINGS
WILLIAM BLAIR & COMPANY

#### PART TT

#### INFORMATION NOT REQUIRED IN PROSPECTUS

#### ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by us in connection with the sale of common stock being registered. All amounts are estimates except the SEC registration fee, the NASD filing fees and the Nasdaq National Market listing fee.

SEC Registration Fee	\$	27,800
NASD Filing Fee		12,000
Nasdaq National Market Listing Fee		95,000
Printing and Engraving Expenses		200,000
Legal Fees and Expenses		500,000
Accounting Fees and Expenses		300,000
Blue Sky Fees and Expenses		10,000
Transfer Agent Fees		25,000
Miscellaneous		30,200
Total	\$1	,200,000
	==	======

#### ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporation Law authorizes a court to award or a corporation's board of directors to grant indemnification to directors and officers in terms sufficiently broad to permit the indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended (the "Securities Act"). Article VII, Section 6 of our bylaws provides for mandatory indemnification of our directors and officers and permissible indemnification of employees and other agents to the maximum extent permitted by the Delaware General Corporation Law. Our certificate of incorporation provides that, subject to Delaware law, our directors will not be personally liable for monetary damages for breach of the directors' fiduciary duty as directors to Sangamo BioSciences, Inc. and its stockholders. This provision in the certificate of incorporation does not eliminate the directors' fiduciary duty, and in appropriate circumstances equitable remedies such as injunctive or other forms of non-monetary relief will remain available under Delaware law. In addition, each director will continue to be subject to liability for breach of the director's duty of loyalty to Sangamo or our stockholders for acts or omissions not in good faith or involving intentional misconduct, for knowing violations of law, for actions leading to improper personal benefit to the director, and for payment of dividends or approval of stock repurchases or redemptions that are unlawful under Delaware law. The provision also does not affect a director's responsibilities under any other law, such as the federal securities laws or state or federal environmental laws. We have entered into indemnification agreements with our officers and directors, a form of which will be filed with the Securities and Exchange Commission as an exhibit to our registration statement on Form S-1. The indemnification agreements provide our officers and directors with further indemnification to the maximum extent permitted by the Delaware General Corporation Law. Reference is also made to the underwriting agreement contained in exhibit 1.1 hereto, indemnifying our officers and directors against specific liabilities, and our Second Amended and Restated Registration Rights Agreement contained in Exhibit 10.4 hereto, indemnifying the parties thereto, including controlling stockholders, against liabilities.

#### TTEM 15. RECENT SALES OF UNREGISTERED SECURITIES

- 1. Since inception through April 3, 2000, we have granted a total of 3,552,000 options and stock purchase rights to purchase our common stock, excluding options returned to our stock plans, with a weighted average price of \$0.21 to a number of our employees, directors and consultants.
- 2. From October 31, 1995 to June 28, 1996, we issued warrants to purchase 106,250 shares of Series A Preferred Stock, 41,250 at an exercise price of \$0.01 per share and 65,000 at an exercise price of \$1.00 per share to several investors.
- 3. From October 1995 to August 1999, we issued 791,250 shares of Series A Preferred Stock to several investors for a total cash consideration of \$750,413.
- 4. In March 1996, we issued 38,000 shares of Common Stock to Colorado Bio/Medical Venture Center, Inc. in connection with a sublease of space.
- 5. In June 1996, we issued 75,000 shares of Common Stock to The Johns Hopkins University in connection with the License Agreement with us.
- $6.\ \mbox{In July 1996},$  we issued 35,000 shares of Common Stock to Frederick Frank as compensation for consulting services.
- 7. In August 1997, we issued convertible promissory notes in the principal amount of \$960,000 and warrants to purchase 64,981 shares of Series B Preferred Stock at an exercise price of \$3.00 per share to several investors. The notes were cancelled and converted into shares of Series B Preferred Stock on November 6, 1997.
- 8. In September 1997, we issued 3,800 shares of common stock to John Colin Cahill as compensation for consulting services.
- 9. From September 1997 to December 1997, we issued 2,358,000 shares of Series B Preferred Stock to several investors for a total cash consideration of \$7,074,000, which includes conversion of the convertible promissory notes and accrued interest thereon described in Item 7 above into a total of 324,666 shares of Series B Preferred Stock.
- 10. In December 1997, we issued 300,000 shares of Common Stock to Edward O. Lanphier II pursuant to the terms of his employment agreement with us.
- 11. In February 1998, we issued 40,000 shares of Series B Preferred Stock to Lehman Brothers, Inc. as compensation for a finder's fee.
- 12. From August 1999 to January 2000, we issued 2,000,000 shares of Series C Preferred Stock to several investors for a total cash consideration of \$9,000,000.
- 13. In January 2000 and March 2000, we issued \$5.0 million and \$7.5 million in principal amount of promissory notes, respectively, which will convert into approximately 789,587 shares of Common Stock upon consummation of our initial public offering.
- 14. On March 13, 2000, we issued 70,000 shares of Common Stock to The Scripps Research Institute pursuant to a license agreement.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering, and we believe that each transaction was exempt from the registration requirements of the Securities Act by virtue of Section 4(2) thereof, Regulation D promulgated thereunder or Rule 701 with respect to compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The recipients in each transaction represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the share certificates and instruments issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us.

DESCRIPTION OF DOCUMENT

#### ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

#### (a) EXHIBITS

**EXHIBIT** 

10.17++

NUMBER

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,
4.211	among Sangamo and certain of its stockholders, dated March, 2000.
5.1++	Opinion of Brobeck, Phleger & Harrison LLP regarding the legality of the common stock being registered.
10.1++	2000 Stock Incentive Plan.
10.2++	2000 Employee Stock Purchase Plan.
10.3	[Intentionally left blank]
10.4++	Form of Indemnification Agreement to be 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. Lanpher
	II, dated June 1, 1997.
10.16++	1995 Stock Option Plan.

Research Funding Agreement, by and between Sangamo and

Baxter Healthcare Corporation, dated January 11, 2000.

27.1++

#### **FXHTBTT** NUMBER DESCRIPTION OF DOCUMENT 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. Consent of Ernst & Young LLP, Independent Auditors. Consent of Brobeck, Phleger & Harrison LLP (contained in 23.1 23.2++ their opinion filed as Exhibit 5.1). 23.3++ Consent of Townsend and Townsend and Crew LLP. 24.1++ Power of Attorney. (see Page II-5)

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- + Confidential treatment requested as to portions of this exhibit.
- ++ Previously filed.

#### (b) FINANCIAL STATEMENT SCHEDULE

Financial Data Schedule.

Schedules not listed have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements on the notes thereto.

#### ITEM 17. UNDERTAKINGS

We undertake to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

To the extent indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons according to the Delaware General Corporation Law, our certificate of incorporation or our bylaws, indemnification agreements entered into between us and our officers and directors, the underwriting agreement, or otherwise, we have been advised that in the opinion of the commission this indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. If a claim for indemnification against these liabilities (other than the payment by us of expenses incurred or paid by any of our directors, officers or controlling persons in the successful defense of any action, suit or proceeding) is asserted by a director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether this indemnification by us is against public policy as expressed in the Securities Act and will be governed by the final adjudication of the issue.

The undersigned registrant hereby undertakes:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of Prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of Prospectus filed by us under Rule 424(b)(1) or (4) or 497(h) of the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective;
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of those securities at that time shall be deemed to be the initial bona fide offering thereof.

#### SIGNATURES

Under the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Amendment No. 5 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Francisco, State of California, on April 5, 2000.

## SANGAMO BIOSCIENCES, INC.

By: /s/ SHAWN K. JOHNSON

Shawn K. Johnson Director of Finance

Under the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

SIGNATURE	TITLE 	DATE	
* Edward O. Lanphier II	President, Chief Executive Officer and Director (Principal Executive Officer)	April 5,	2000
/s/ SHAWN K. JOHNSONShawn K. Johnson	Director of Finance (Principal Accounting Officer)	April 5,	2000
	Director	April 5,	2000
Herbert W. Boyer, Ph.D.			
*	Director	April 5,	2000
William G. Gerber, M.D.			
*	Director	April 5,	2000
John W. Larson			
*	Director	April 5,	2000
William J. Rutter, Ph.D.			
*	Director	April 5,	2000
Michael C. Wood			

II-5

/s/ Shawn K. Johnson Shawn K. Johnson

Attorney-in-Fact

\*By:

# EXHIBIT INDEX

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EXHIBIT NUMBER

DESCRIPTION OF DOCUMENT

Power of Attorney. (see Page II-5) Financial Data Schedule. 24.1++ 27.1++

- -----

+ Confidential treatment requested as to portions of this exhibit.

++ Previously filed.

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

We consent to the reference to our firm under the captions "Selected Financial Data" and "Experts" and to the use of our report dated January 28, 2000, except for Note 7, as to which the date is March 28, 2000, in Amendment No. 5 to Registration Statement (Form S-1 No. 333-30134) and related Prospectus of Sangamo BioSciences, Inc. for the registration of 5,750,000 shares of its common stock.

/s/ ERNST & YOUNG LLP

Palo Alto, California April 5, 2000